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Creditor Relations

1. William R. Cline

The Role of the Private Sector in Resolving Financial Crises in Emerging Markets

6.1.1 Introduction

Three years have passed since the outbreak of the East Asian financial crisis, and six since that of its Mexican precursor. Numerous official groupings and private analysts have sought to derive from these experiences appropriate lessons for international policy, including especially the manner in which private creditors can most fruitfully be involved in crisis resolution (G10 1996; G22 1998; IMF 1999b; G7 1999; IIF, 1996, 1999 b,c; Council on Foreign Relations 1999; Eichengreen 1999; Meltzer Commission 2000). Although there is considerable agreement on the central issues of crisis prevention, and although substantial improvement has occurred in this area (including heightened data transparency and a shift from fixed to floating exchange rates by a number of key economies), more significant divergences persist regarding how to involve private creditors in the resolution of those crises that do occur.

The principal divisions on the latter issue are on the questions of, first, whether official support on the relatively large scale of the key packages of

The views here were presented in the author's personal capacity and should not be interpreted as official positions of the Institute of International Finance. The author is grateful to Kevin Barnes, Bejoy Das Gupta, Martin Feldstein, and Lubomir Mitov for comments on an earlier draft.

the late 1990s is desirable (given evident success in the cases of Mexico, Korea, and Brazil) or undesirable (e.g., because of the risk of moral hazard), and, second, whether the nature of private-sector involvement should follow predetermined rules or should be determined on a case-by-case basis. On the latter question, some European officials have tended toward a rules basis, whereas U.S. officials have emphasized the need for case-by-case resolution of crises.

This paper will suggest that the approach most in keeping with an understanding of today's international capital markets is one that seeks to involve private creditors on as voluntary a basis as possible given the circumstances, and that, within the classic principles of financial crisis management (Bagehot [1873] 1917), temporary large official support can indeed be appropriate where the country is illiquid rather than insolvent and a prompt turnaround in private flows through adjustment and restoration of confidence is likely.

Section 6.1.2 reviews the differences between today's capital market and that of the 1980s, as a basis for inferring appropriate changes in crisis resolution strategy. Next the discussion considers what economic theory about sovereign lending would tend to counsel in the design of crisis resolution approaches. The paper then turns to actual experience in several of the recent country crisis cases. After evaluating one of the more prominent proposals for reform (inclusion of collective action clauses in bonds) and briefly considering the likely future composition of lending to emerging markets, the discussion concludes with a synthesis of policy implications.

6.1.2 The 1980s versus the 1990s

It is sobering that each of the past two decades has witnessed a widespread crisis in external financing for emerging market economies. The Latin America debt crisis of the 1980s was the more severe, precipitating a "lost decade" of growth there and ending up in debt forgiveness of about 35 percent for bank claims on much of the region (Cline 1995, 234). The spate of financial crises that began in 1995 with Mexico and was followed by East Asia in 1997–98, Russia in 1998, and Brazil in 1999 turns out to have been approximately comparable in scope although not (generally) in severity. Thus, as shown in table 6.1, the fraction of external debt to private creditors involved reached about 60 percent of the emerging markets total in both the 1980s and 1990s crises. The geographical pattern was sharply different, with concentration in Latin America in the 1980s but involvement of Asia and Russia in the 1990s.

The 1990s crises were more oriented toward collapses of currencies and domestic financial systems and less centered on excessive burdens of external debt. A severe mismatch of large short-term external debt against reduced external reserves was a typical precipitating factor (especially in Mex-

Table 6.1 **Scope of Debt and Financial Crises in the 1980s and 1990s (Debt owed to private external creditors, $ billion)**

	1984			1996		
	Bank	Other	Total	Bank	Other	Total
Latin America						
Argentina	32.7	8.1	40.8	—	—	—
Bolivia	1.1	0.1	1.2	—	—	—
Brazil	79.8	4.7	84.5	51.2	126.4	177.6
Chile	16.0	0.7	16.7	—	—	—
Ecuador	4.9	0.5	5.4	2.3	6.2	8.5
Mexico	81.2	5.7	86.9	30.1	79.4	109.5
Peru	4.5	1.1	5.6	—	—	—
Uruguay	2.9	1.0	3.9	—	—	—
Venezuela	31.8	3.2	35.0	—	—	—
Africa and Middle East						
Cote d'Ivoire	4.9	0.9	5.8	—	—	—
Morocco	3.5	0.1	3.6	—	—	—
Europe						
Poland	7.2	1.5	8.7	—	—	—
Russia	—	—	—	37.7	25.0	62.7
Asia and Pacific						
Indonesia	—	—	—	55.9	25.2	81.1
Korea	—	—	—	127.8	28.8	156.6
Pakistan	—	—	—	4.4	5.8	10.2
Malaysia	—	—	—	19.8	13.9	33.7
The Philippines	14.4	3.7	18.1	12.2	15.4	27.6
Thailand	—	—	—	68.8	13.5	82.3
Total	284.9	31.3	316.2	410.2	339.6	749.8
Percent of total for 37 major emerging market economies	65.7	41.5	62.1	57.4	54.4	56.0

Source: IIF (1994, 2000b)

Note: Dash indicates that country was not directly involved in the period's crisis.

ico, Korea, and Thailand), rather than a high ratio of total external debt to exports and gross domestic product (GDP), as was more typical in Latin America in the 1980s. Underlying economic structures and policies tended to be better in the 1990s (with the advent of trade liberalization, privatization, and fiscal adjustment). Stronger underlying conditions and the shorter-term nature of the financial squeeze meant that it was possible for the key economies involved in the 1990s crisis to return to economic growth much faster than those in the 1980s crisis, and to do so on a basis of return to normalized capital market access without debt forgiveness (excluding the cases of Russia and Indonesia, where political incoherence was far more severe).

One important difference between the 1980s and 1990s was the prevalence of capital controls in the former and capital mobility in the latter. This meant that when difficulties occurred in the 1980s, there was a tendency to

go into arrears on official debt and to ration availability of foreign exchange for payment of external debt by private firms that otherwise were capable of servicing it. In contrast, under mobile capital regimes in the 1990s, the crises manifested themselves in plunging exchange rates rather than foreign exchange rationing, and in balance sheet shocks to domestic banks and corporations exposed in foreign currency–denominated obligations. The presence of capital quantity rationing in the 1980s in contrast to price clearing in the 1990s is one reason the latter crisis was shorter and much more front-loaded in its severity.[1]

Table 6.1 shows a crucial difference between the capital markets in the 1980s and the late 1990s. For the emerging markets in aggregate, in 1984 external debt to banks was nine times as large as that owed to nonbank private creditors. In contrast, in 1996 the debt owed to banks was approximately equal to that owed to nonbanks, the latter primarily in the form of bonds. These estimates confirm the by now widely recognized transformation of the emerging markets' debt composition from overwhelming dominance by international banks to approximate parity between bank and bond obligations.

Another key difference between the two decades is that for the banks, exposure to emerging markets was much larger relative to their total assets and capital in the 1980s than it is today. Thus, for U.S. banks, exposure to emerging market economies fell from 12 percent of total assets in 1982 to 2.5 percent in early 2000 (Dallara 2000). The sharp reduction in banks' vulnerability to emerging markets' debt, combined with the decline in their share of total debt, has meant that increasingly such 1980s-style solutions as "concerted lending" by banks have become outdated.

Finally, by the late 1990s the capital markets were much more heavily dominated by equity flows, especially direct investment, than in the 1980s, when bank lending was predominant. Thus, of total net foreign private capital flows to twenty-nine major emerging market economies, direct equity accounted for 31 percent in 1993–96 but rose to 68 percent in 1997–2000 (IIF 2000a,b). As a result, the impact of private-creditor participation in crisis resolution has become at least as important through its confidence effect on direct investment flows as through its direct capital impact through lending. The same point applies to portfolio equity flows, although these have held more steady (15 percent of net foreign capital flows in the first period and 13 percent in the second). In contrast, both direct and portfolio capital flows to emerging markets in the period 1980–84 accounted for only 11 percent of the total in that period, with net flows from banks accounting for 74 percent and nonbank private credits accounting for 15 percent (IIF database).

1. Thus, Korea's GDP fell 6.7 percent in 1998 but by 2000 was 13 percent above its 1997 level. In comparison, weighting by 1984–86 GDP, output fell only 1.6 percent in 1983 for Argentina, Brazil, and Mexico, but by 1986 it was still only 10 percent above the 1982 base (IMF 1999a).

Other contrasts between the 1980s and 1990s are also important. There has been a shift in lending away from sovereign borrowers toward private corporate and bank borrowers. Within bank lending, there has been a shift toward shorter-term (typically trade-related) credits, in part because banks considered long-term lending to Latin America to be vulnerable to restructuring after the 1980s experience. Finally, the shift away from bank toward bond and other nonbank lending has been especially pronounced when evaluated in terms of flows rather than outstanding stocks (cumulative new net flows from banks to twenty-nine major emerging market economies in 1997–2000 will have been –$61 billion, compared to $204 billion from nonbank lenders). As discussed below, there are reasons to expect the role of banks to remain reduced in the future, even though their net lending is likely to turn positive again.

The overall implication that emerges from consideration of today's composition of capital markets is that involvement of bank lending alone will usually be too small in potential to resolve crises directly. Instead, the principal impact will have to be through the general improvement in confidence that any such involvement will have for a much broader array of capital flows, especially in the form of direct investment. This inference is consistent with the premise that market-oriented, voluntary resolutions are desirable, because it is such outcomes that are most likely to preserve a capital-market atmosphere that is congenial to business as usual for direct investment, portfolio equity flows, and new bond issues.

6.1.3 Conceptual Framework[2]

Default Pain as Quasi-Collateral

It is crucial that policies toward crisis resolution be framed with an understanding of the underlying theory of sovereign lending. A seminal contribution to this theory is Eaton and Gersovitz (1981). They ask why anyone would lend to a foreign sovereign. There is no physical collateral. The tradition of sovereign immunity is a further deterrent. Their analysis appeals to consumption smoothing as the motive for sovereign borrowing. Countries borrow abroad when times are bad (e.g., because of an export price collapse) and repay when they are good. On the side of lending supply, the principal assurance lenders have that they will be repaid is the sovereign borrower's knowledge that if it defaults it will be locked out of capital markets in the future and will no longer have recourse to the opportunity to borrow for consumption smoothing.

This theory means that any international arrangements that convey the impression that default is painless will tend to depress capital flows to

2. Also see Cline (2000b).

emerging market economies. Essentially, a default-friendly international regime deprives international lenders of their quasi-collateral: heightened economic difficulty for the defaulter. The defaulting country may enjoy a one-time windfall gain of not having to repay its outstanding debt, but it will face a dearth of willing lenders in the future. Perhaps more important, there will be a negative externality of the defaulting country's actions for other emerging market borrowers. If it is blessed by an international regime seen as facilitating the default, the country's actions will increase the perceived risk of lending to all emerging market borrowers.

In such a conceptual framework, it is easy to see how good intentions by international policymakers could turn counterproductive. There are grounds for judging that this in fact happened during the course of 1999–2000. The seeming shift toward official international facilitation of default, most notably in the case of Ecuador, seems likely to bear some responsibility for the sluggishness of the return of capital flows to emerging markets three years after the onset of the East Asia crisis and the persistence of high lending spreads to many emerging market economies. Thus, for 2000 the net flow of bank and nonbank (mainly bond) lending to twenty-nine major emerging market economies is projected by the Institute of International Finance (IIF) at only $26 billion (IIF 2000a). Although this is up from the trough of –$17 billion in 1999, it remains minimal compared to the average of $157 billion annually in 1995–97.

Similarly, whereas spreads (above U.S. Treasury obligations) on long-term Eurobonds for Argentina and Brazil averaged 360 basis points at the end of 1996, by early September 2000 they were still as high as an average of 680 basis points, albeit below their peak average of 1,240 basis points at the end of August 1998 after the Russian default. A spread of 700 basis points on thirty-year paper implies a probability of default of two-thirds if the recovery rate is 50 percent (Cline and Barnes 1997, 40). This seems an exaggerated pessimism and is consistent with a capital market that remains poorly recovered from the crises of the late 1990s.

Moral Hazard

On the other side, the principal conceptual argument that has been invoked in favor of "bailing in" private creditors and leaning toward ensuring they take default losses has been that otherwise the public sector would be creating a moral hazard that would induce excessive lending and risk-taking by creditors anticipating high returns in the good-case outcome and public bailout in the bad.

The large headline figures for the official support packages of the late 1990s ($50 billion for Mexico, $17 billion for Thailand, $34 billion for Indonesia, $57 billion for Korea, $16 billion for Russia, and $42 billion for Brazil; IIF 1999c, 48) not surprisingly spurred critiques that such public support had created moral hazard (e.g., Meltzer Commission 2000). It is

certainly likely that even the meager lending flows that have returned would have been smaller, and the still high spreads would have been higher yet, in the absence of these packages and the strong turnarounds they permitted in most of these crises (with Russia and Indonesia the exceptions, primarily for political reasons).

The more fundamental point, however, is that public-sector intervention that permits a large positive-sum-game outcome will often have some inevitable moral hazard side effect, just as the existence of automobile insurance and home theft insurance may at the margin make drivers a bit less cautious and homeowners a bit more willing to go on long trips. The central question is not whether there is moral hazard, but whether it is large and whether its costs exceed the social benefits provided by the intervention in question. There is no doubt that the impressive economic recoveries in Mexico, Korea, Brazil, and to a lesser extent Thailand would not have happened without the confidence supplied by the official support programs, so their social benefits appear to have been large.

As for moral hazard costs, in the large financial crises of the late 1990s private creditors and investors took large losses, so they are hardly likely to have learned the lesson that emerging markets' investments are risk-free because of official bailouts. Thus, realized or potential losses by foreign investors in emerging markets in 1997–98 from the East Asian and Russian crises amounted to about $240 billion in stock markets, $60 billion for banks, and $50 billion for other creditors including bondholders (IIF 1999c, 57–61). Specific econometric tests reject the hypothesis that the first of the packages, for Mexico in 1995, induced excessive lending at low spreads.[3] After the broader set of support programs in the late 1990s, the evidence shows that lending flows remain small and spreads remain high, strongly suggesting that any moral hazard was too small to induce excessive new lending at unduly low interest rates. In short, the critique that public support in resolving the major financial crises of the late 1990s involved moral hazard is true but trivial and misses the more relevant point that moral hazard costs were minor relative to recovery benefits.[4]

Burden Sharing

A general notion that the private sector should bear its share of the "burden" of resolving financial crises has also driven policy discussions. Here

3. Zhang (1999). The tests show instead that the large flows at low spreads by early 1997 were driven by global capital market conditions as proxied by spreads in the U.S. high-yield corporate market. Removing this influence and that of country-specific economic debt and economic indicators, emerging markets' spreads in the fourth quarter of 1995 through the second quarter of 1997 were not statistically significantly lower than before the Mexican support program.

4. It should be noted that the one country where moral hazard likely played a significant role in buoyant lending was Russia, where geopolitical importance was frequently assumed to ensure support if needed.

the key is to recognize the intertemporal pattern likely in well-managed crises. At the height of the crisis there may be temporary public-sector support even as private lending is low or even negative. Once forceful adjustment measures are taken and it becomes clear the country will not enter into protracted default, a strong renewed inflow of private flows can occur. Thus, in Korea, net private capital inflows (including equity) fell from $48 billion in 1996 to –$14 billion in 1997 and –$24 billion in 1998 but rebounded to $8 billion in 1999 and $24 billion in 2000. Net official flows were –$0.4 billion in 1996 and jumped to $18 billion in 1997 and $12 billion in 1998, but they dropped to –$9 billion in 1999 as Korea repaid International Monetary Fund (IMF) funding. Thus, although a snapshot of capital flows at the height of the crisis in 1998 would give the impression that the public sector was bearing the burden and the private sector was escaping, this interpretation would miss the more fundamental point of the balance-wheel role of official intervention and the dynamic picture of a return to private flows once adjustment measures have been taken and confidence restored. A similar U-shaped pattern for private flows, complemented by an inverted-U shape for public flows, depicts the resolution of the Mexican crisis in 1995 and the Brazilian crisis in 1998–99 (Cline 2000b).

It is also the case that for emerging markets as a whole, private capital flows have by far dominated the totals, casting further doubt on any broader impression that the burden of development finance is being borne by the public sector (even though the private flows are certainly not undertaken to shoulder any burden, but for profit). Even in 1997–98 at the height of the crises, net public capital flows to twenty-nine major emerging market economies were less than one-fourth private flows (a two-year total of $97 billion versus $409 billion, respectively). By 1999–2000, the relationship was back to its far more lopsided dominance by private flows, with a total of only $8 billion in net official flows versus $330 billion in net private flows (IIF 2000a).

The most narrow application of burden sharing is in the notion of "comparability" for private-sector treatment in Paris Club rescheduling of bilateral claims.[5] For example, if within the Paris Club official creditors reschedule for, say, a three-year period payments otherwise due to their export credit agencies, comparability would lead them to make it a condition of the rescheduling that the borrowing government seek rescheduling for a similar period from private creditors. Although unexceptionable in principle,

5. The Paris Club is an arrangement used by industrial-country governments when it becomes necessary to negotiate the restructuring of claims owed to their agencies by a government or private borrowers in a particular country. The term dates from 1956 when bilateral official creditors met in Paris to reschedule claims owed by Argentina (Rieffel 1985, 3). Principles of Paris Club rescheduling include the requirement that the country be engaged in an IMF adjustment program and that "comparable treatment" be granted to the debtor country by other creditors (traditionally commercial banks and, where relevant, bilateral creditors not normally in the Paris Club).

this concept has sometimes been applied in questionable ways. Apparent public-sector support for default on Ecuador's Brady bonds—which had already forgiven private claims, whereas bilateral claims had not been forgiven—is one example (although the Paris Club itself may not have formally requested Ecuador to default prior to the government's action). Paris Club relief for political purposes, as in the case of Poland in the early 1990s, is questionably appropriate for extension to the private sector, which does not enjoy the same political benefits as the industrial-country governments. Nor has the Paris Club typically accepted comparability when it could work in the opposite direction. A notable recent case is that of Russia, where private creditors gave substantial forgiveness in early 2000, but the Paris Club has resisted Russian government requests to grant comparable forgiveness.

The underlying point is that a rigid approach to burden sharing will be misguided when its effect is to damage the prospects of return to voluntary capital markets and thereby is more likely to harm than help the country in question over the medium term.

Market-Based Collective Action

An important concept for understanding the potential for private-sector involvement in crisis resolution is that of private-sector collective action on a voluntary or quasi-voluntary basis. Where a moderate number of relatively large financial institutions have short-term claims coming due, they may be able to carry out a joint action that is to their collective benefit by undertaking to maintain rather than run off their credit lines. This was the case in the Korean crisis (more formally through conversion of short-term to one- to three-year claims) and the Brazilian crisis (less formally through a pledge to maintain credit lines). The basic dynamic may be seen as a positive sum repeat game. Each institutional "player" knows the others, or most of them, and knows that its own adherence to the joint endeavor will affect the other players' future confidence in its reliability.

Voluntary club-based collective action is sharply different in effect from mandatory action imposed by the public sector, even though advocates of the latter also frequently cite the private creditors' own collective interest. It is noteworthy that in neither the Korean nor Brazilian case was there legal prohibition by the government of payment rather than rollover (or conversion) of short-term claims, and in fact a number of smaller institutions did elect to withdraw. A critical mass of support from larger firms was nonetheless successful. If instead there had been a comprehensive official freeze on payments, the results would have been radically different, with the return to capital markets greatly delayed.

It is also important to recognize that the positive impact on confidence from a voluntary collective action such as maintenance of credit lines can be far greater than might be expected by the share of total debt directly

comprised by the initiative in question. Thus, in the case of Korea, a debt of $22 billion in short-term bank claims was converted, compared with Korea's total external debt of $159 billion at the end of 1997. Similarly, short-term trade and interbank claims of banks in Brazil were only about $25 billion by March 1999 when the banks entered into a voluntary arrangement to maintain credit lines (IIF 1999a), compared with total external debt of $259 billion at the end of 1998. However, in both cases the agreements to stem short-term outflows were crucial catalysts to the rapid rebuilding of confidence. In part this is because much of the rest of the debt was at longer term and could not immediately exit. The longer-term nature of bonds, in particular, means that they are rarely the proximate cause of a sudden liquidity crisis. More fundamentally, however, the initiatives, done on a quasi-voluntary rather than mandatory basis, sent a strong signal that key private-sector players had confidence in the country's longer-term prospects. This signal helped restore confidence more broadly.

Lender of Last Resort and Size of Official Support

Another key issue is whether the large official support programs of the late 1990s were appropriate. Here the most useful conceptual premise is Bagehot's ([1873] 1917) rule for a central bank: in a panic, lend in unlimited amounts to a solvent but illiquid bank; do not lend at all to an insolvent one. Cline (2000b) proposes a "Bagehot curve" as guidance for public policy in crisis resolution. On the vertical axis is the amount that can be provided in official support; on the horizontal axis is the probability that the country's situation is one of insolvency (ranging from zero to unity). Near the y-axis (near-zero probability of insolvency) official support can be extremely large (for example, many times the usual IMF quota) under the Bagehot lender-of-last-resort principle. As the probability of insolvency rises, the appropriate amount of official support drops rapidly.

By this gauge, the large official support programs in a quasi-lender-of-last-resort function were highly appropriate for Mexico, Korea, Thailand, and Brazil. They were arguably more doubtful for Russia and even Indonesia, although it warrants emphasis that neither IMF nor bilateral forgiveness has occurred even in these cases despite defaults on private claims (although in Indonesia defaults were only by private debtors). It should also be stressed that the country's underlying likelihood of assuring solvency, primarily by forceful policy action, should be the appropriate guide to whether relatively large official support is made available—not the criterion of systemic importance. The latter (for example, as proposed by Council on Foreign Relations [1999], which argues that in nonsystemic cases the IMF should "just say no" to large packages) would discriminate against small countries. In short, there is no room for financial acrophobia in international financial policy for crisis resolution, even though policymakers need thick skins to withstand the public backlash that typically accompanies big-ticket headline numbers.

A related question regarding the size of official support is whether it

should be limited to traditional magnitudes relative to IMF quotas. The answer would seem "surely not," considering that these quotas were set at a time when trade imbalances were the primary determinant of financing needs rather than today's highly mobile capital flows. It became particularly evident in the case of Korea that the traditional IMF financing magnitudes of one to three times quota had become outdated, and the new Supplementary Reserve Facility (SRF) created in late 1997 made it possible for the IMF to lend $21 billion to Korea, or more than nineteen times Korea's quota. The SRF, with its much larger and front-loaded lending capacity with high and rising interest rates to encourage early repayment, is one of the most important concrete institutional changes to come out of the late 1990s' financial crises. The likelihood of prompt repayment to the SRF (as occurred in the cases of Korea and Brazil), moreover, means that the international financial community is likely to have available the resources to provide relatively large temporary financing in a crisis (except perhaps in a scenario in which massive contagion once again envelopes a number of the largest emerging market economies). Whether it will have the corresponding political will is unclear, although this would seem more problematic for the mounting of bilateral components of any future crisis management efforts than for the use in the IMF of the SRF and, perhaps, the Contingent Credit Line (CCL), both of which were designed specifically for this purpose.

Voluntary Approaches to Private-Sector Involvement

In view of the conceptual framework outlined here, the fundamental principle of private-sector involvement in crisis resolution is that it should be on as voluntary and market-oriented a basis as possible in view of the circumstances. This will maximize the chances of a prompt return to private-market access and limitation of public support to a temporary balance-wheel role for restoring confidence. Publicly mandated approaches, such as involuntary standstills enforced by exchange controls, should be avoided whenever possible, because they undermine the underlying dynamic of sovereign lending by facilitating default and not only delay return to market access but also risk adverse spillover to private lending to other countries through heightened perceived risk.

Along the spectrum from voluntary to involuntary approaches, the cases of Mexico in 1995, Korea in 1997–98, and Brazil in 1998–99 are toward (or, for Mexico, at) the voluntary end; those for such countries as Ukraine and Pakistan are toward the involuntary end; and the unilateral defaults of Russia and Ecuador are at the involuntary end. The discussion that follows reviews in summary fashion the course of private-sector involvement in crisis resolution in these and other cases.[6] The experience to date tends to confirm that more voluntary approaches generate more favorable outcomes for the country itself and arguably for the system as well.

6. For the cases of Thailand, Indonesia, and Korea, also see Cline (1998).

6.1.4 Resolving Liquidity Crises: Mexico, Thailand, Korea, Brazil

This section reviews the role of the private sector in achieving crisis resolution in four major country episodes that together represent a class of cases that involved potential systemic stakes and achieved relatively successful outcomes on the basis of voluntary or quasi-voluntary private-sector involvement. The discussion focuses primarily on how the private sector participated in each case. The treatment is chronological, because there was a learning-by-doing process at the international policy level, as well as a changing political environment for policy options.

Mexico

A large current account deficit (7 percent of GDP), two key political assassinations in an election year, adherence to a nearly-fixed exchange rate regime, heavy reliance on short-term obligations in the government debt structure, and considerable sterilization of capital outflows all played important roles in Mexico's end-1994 crisis. It is questionable whether more skilled management by the new economic team in December could have averted the collapse.

The U.S. Treasury led an international program of official support amounting to $50 billion. The decision to do so undoubtedly reflected recognition that otherwise the encouraging revival of emerging capital markets after the prolonged debt crisis of the 1980s and its tentative resolution by the Brady Plan would be in serious jeopardy of collapse. The magnitude of the package reflected the dimensions of the key variables capital markets were focusing on at the time: some $30 billion due in short-term dollar-indexed government obligations (*tesobonos*) against reserves that had eroded to only about $6 billion.

Direct private-sector involvement in initial resolution of the crisis is easy to describe in the Mexican case: there was none. U.S. Treasury Secretary Robert Rubin often stated in response to later critiques of the bailing out of the private sector that if he could have found some way to make private creditors pay some price without hurting Mexico, he would have done so. However, the obligations in question were dispersed capital market holdings, so the 1980s tactic of calling a London Club meeting of banks to reschedule claims was irrelevant.[7] Importantly, Mexican policymakers were

7. The London Club is an ad hoc arrangement of private creditors, historically primarily commercial banks, that coordinates the negotiation of external debt restructurings with developing-country governments. Participation varies depending on the composition of exposure in each case. Rieffel (1985, 4) identifies the first London Club rescheduling as that for Zaire in the mid-1970s. London Club activity was particularly important in the Latin American debt restructurings of the 1980s. Typically negotiations were led by an advisory committee of leading banks. Today, with the sharp ascendance of bond lending, a growing issue is whether the London Club process lends itself to extension to include representatives of bondholders.

loath to repeat the August 1982 measure of a unilateral suspension of principal payments. Mexico had simply paid too dearly in reestablishing its credit reputation in the intervening decade to make that an attractive option at the end of 1994.

Some private-sector investors believed they had been penalized, because they had held Mexican equities and peso-denominated government paper (*cetes*) only on government assurances that there would be no devaluation. Instead, the peso lost 35 percent of its value in December alone. Such private-sector complaints did not take account of the rich interest rates that had been earned on peso obligations (14–15 percent annually in 1993–94 while the peso had remained virtually unchanged against the dollar).

The private sector did eventually participate in Mexico's crisis resolution, by renewing inflows of capital after the devaluation and after tight monetary policies began to take hold. Private flows swung from –$4.8 billion in 1995 to $13.6 billion in 1996, primarily in direct investment and to some extent in bond flows. Mexico was thus the first case in the 1990s of successful balance-wheel official intervention that, along with forceful policy adjustment, revived confidence and a return of private capital.

Thailand

Thailand was the first of the East Asian financial crises of 1997–98. The region's crisis was marked by greater incidence of short-term bank claims than in Mexico, where nonbank holdings of short-term government obligations were the proximate problem. The relatively greater involvement of banks in Asia reflected the fact that after the Latin American debt crisis, banks had shied away from that region but had increasingly considered lending to Asia relatively safe and promising in view of the region's image of sustained high growth. Thailand was the first country where the growing strains of rampant expansion became evident, including an increasingly overextended domestic financial system. Rapid domestic credit expansion and an increasingly overvalued exchange rate (accompanied by a current account deficit of almost 8 percent of GDP) set the stage for a crisis.

By the second quarter of 1997 there was an increasing awareness that Thailand had undertaken forward currency commitments that made its effective reserves far lower than the reported totals. Facing increasing pressure on the baht, at the beginning of July the government allowed the currency to float, ending its thirteen-year peg to the dollar. Within the month the currency fell 22 percent, and it was destined to fall considerably further.

The crisis exposed the fragility of the domestic financial system. The greatest weakness was among some ninety finance companies, whose lending was concentrated in property, auto, and securities margin lending vulnerable to the sharp turnaround from rapid growth in the economy to recession. The central bank suspended operations of sixteen finance companies in June 1997 and of another forty in August.

Direct private-sector involvement in crisis resolution in the case of Thailand centered in the restructuring of claims on these finance institutions. These claims amounted to some $4 billion, only about 6 percent of total foreign claims (IIF 1999c, 65). The Thai government distinguished between financing companies, whose obligations were restructured, and commercial banks, for which the government guaranteed obligations. For claims on the sixteen finance companies closed in June, amounting to about half of affected foreign claims, creditors were entitled only to proceeds from auctions of assets. For claims on the forty finance companies subsequently closed, creditors were given five-year obligations on the main state bank at 2 percent interest.

In effect, then, a relatively limited restructuring of only a small portion of foreign claims—those on the suspended finance companies—was the only direct involvement of the private sector in resolution of the Thai crisis. In the case of Thailand, moreover, there continued to be a running down of foreign bank claims during 1998 through 2000, primarily from conscious deleveraging on the demand side rather than further contraction on that of lending supply. These repayments were facilitated by a massive swing of the current account from a deficit of about 8 percent of GDP in 1996 to a surplus of almost 13 percent in 1998.[8]

Because the Thai case involved only surgical rescheduling, it stands toward the voluntary end of the spectrum of private-sector involvement in crisis resolution. Although there is some support for a resulting reflow of voluntary capital in the fact that inflows of (mainly) direct and portfolio equity more than doubled from 1996 to a range of about $7 billion annually in 1997–99, the persistence of net debt repayments after the crisis leaves the case for renewed market access ambiguous so far.

For its part, the international official support for Thailand was complicated by the political backlash to the earlier U.S. official support for Mexico. The U.S. Congress had passed legislation prohibiting use of the treasury's Exchange Stabilization Fund for this purpose for a specified time period after the Mexican package, and this time limit had not yet expired by July 1997. In any event there appears to have been some official sentiment that whereas Mexico was primarily the United States' problem, Thailand was primarily that of Japan. By August, an international support program had been assembled involving a total of $17 billion, with $3.9 billion from the IMF, $1 billion each from the World Bank and Asian Development Bank, $4 billion from Japan, and $6 billion from other governments. The support and economic adjustment program contributed to economic recovery by 1999, but only after a severe recession (10 percent decline in GDP) in 1998.

8. Net bank flows to Thailand fell from $13.4 billion in 1996 to –$6.9 billion in 1997, –$9.7 billion in 1998, and –$12.1 billion in 1999 (IIF database).

Korea

By the time of the September 1997 IMF-World Bank meetings in Hong Kong, there was a nervous relief in international financial circles that Thailand's crisis was being managed with little damage to the international economy. There had been significant declines in regional exchange rates (by 20–25 percent from the end of June to the end of September for Indonesia, Malaysia, and the Philippines, albeit only 3 percent for Korea), but there was not yet a sense of severe regional crisis. Soon, however, the force of contagion was to prove far more virulent than anticipated, as the largest and most industrialized economy in the region was swept into the crisis.

Korea had already experienced signs of difficulty in the spring of 1997 as problems from excess capacity and high corporate debt began to surface. Some large corporate bankruptcies had begun to reveal the exposure of the banking system. Korea's earlier entry into the Organization for Economic Cooperation and Development (OECD), along with some financial-sector liberalization, had contributed to a sharp run-up in borrowing from foreign banks. Short-term debt, in particular, had soared (from $39 billion at the end of 1993 to $97 billion at the end of 1996; IIF 1999c, 89).

The incipient regional crisis brought an intensified focus of attention on Korea and other major borrowers in the region. Through most of 1997 foreign lenders took comfort from the broad notion that the government was capable of rendering support if needed, especially to the Korean banking system. By the fourth quarter the uncertainty associated with the presidential election contributed to more pressure on the capital account. The most severe blow, however, came in early December, when it was revealed that the central bank had already committed the bulk of its reserves to foreign branches of Korean banks. With usable official reserves below $10 billion and short-term external debt in the range of $100 billion, there was an acute market realization that even if the Korean government wanted to support external obligations of domestic banks or corporations, it might not have the resources to do so. In the final days of December there was thus an incipient financial meltdown even though the president-elect had committed to undertaking a far-reaching IMF adjustment program (involving structural changes such as deleveraging by the highly indebted *chaebol* conglomerates).

Korea's economy is so large, and its involvement in international trade and finance so substantial, that its crisis qualified as one potentially posing a systemic threat even under a stringent definition. Given the experience with international official support for Mexico, as well as that for Thailand, it is not surprising that international official support was thus soon mobilized for Korea (and by this time the restrictions on the U.S. Exchange Stabilization Fund had expired). The magnitude had to be large to be convincing, especially because financial markets were highly focused on the large

gap between short-term external debt and usable reserves. A package of $57 billion in official support was thus assembled, with $21 billion from the IMF, $14 billion from other multilateral sources, and $22 billion in "second line of defense" funds available from U.S. and other bilateral sources. Notably, the IMF opened a new lending window (the Supplementary Reserve Fund) to permit such large lending relative to Korea's small IMF quota, and it incorporated sizable and rising interest rates to provide a strong incentive for prompt repayment.

Announcement of the program by mid-December did not suffice to stem capital market pressures, however, perhaps in part because only $14 billion was to be available immediately. Reported reserves fell from $31 billion at the end of October to $21 billion by the end of December, and usable reserves were much lower at some $6 billion. The government was no longer able to hold its daily limit to the decline in the currency, and the won lost 31 percent of its value from the end of November to the end of December after having already lost a cumulative 22 percent during October and November.

It was in this crisis environment that U.S. policymakers and their Group of Seven (G7) counterparts adopted a significant shift in the crisis management strategy of the late 1990s. They approached the major international banks and conveyed the message that it was essential to halt the rapid runoff in short-term bank claims, or otherwise the whole program would be in jeopardy.[9] By early January the banks had agreed to hold short-term credit lines for a period of three months, and discussions began on the conversion of these claims into longer-term obligations. The announcement of the short-term rollover initiative, combined with a surge in the monthly trade balance from near zero in October-November to a surplus of $2 billion in December, broke the momentum of the crisis, and as some measure of calm returned the exchange rate partially reversed its sharp descent to appreciate by 12 percent from the end of December to the end of January 1998.

By March the exchange of short-term claims was in place. Some $22 billion in short-term international bank claims on Korean banks was exchanged into one- to three-year bonds guaranteed by the government and bearing spreads above U.S. Treasury interest rates for comparable maturities of 225 to 275 basis points above the London interbank offer rate (LIBOR), considerably higher than the original terms but below market rates at the time of the crisis. In effect, this coordinated conversion of short-term claims came the closest of any crisis management episode in the late 1990s to the London Club reschedulings of bank claims on Latin America in the 1980s. This outcome was in part possible because much of Korea's external

9. It is not clear, however, that officials told banks there would be no more official support without a bank package, and indeed the official package had already been constructed. Such conditioning was much more explicit in the Latin American reschedulings with IMF support in the 1980s.

debt was to banks. At the end of 1996, 78 percent of external debt was owed to banks and only 17 percent to bondholders and other nonbank private creditors (IIF 2000b), making Korea something of a throwback to earlier debt profiles in comparison with many other emerging market economies by the late 1990s.

The conversion deal was de jure voluntary, because there was no legal restriction against running down rather than converting credit lines, and there was no control limiting foreign exchange availability to repay short-term loans. Some smaller banks did indeed run down lines rather than convert them. The Korean negotiating position was viewed by the banks as tough, although the government guarantee was an enhancement and by 1999 the interest spreads on the conversion bonds again looked attractive. Overall, the outcome was relatively balanced and, if not fully voluntary, at least quasi-voluntary.

Brazil

In 1994 Brazil ended decades of increasingly high inflation by adopting a successful stabilization program built around the anchor of a quasi-fixed exchange rate, the real.[10] Underpinned by privatization, high real interest rates, and some fiscal adjustment, the Real Plan succeeded in halting inflation but left Brazil by 1998 with an arguably overvalued exchange rate and a relatively large current account deficit (4.3 percent of GDP in a large economy with a relatively modest export base). The strategy counted heavily on increased productivity to validate the exchange rate. Whether this would have worked in normal times is unclear, but in a context of global contagion from East Asia and then from the Russian crisis in August 1998, the strategy proved infeasible. From the end of June to the end of September reserves had fallen from $71 billion to $46 billion, and by January the exchange rate had collapsed despite the mounting of a large official support program.

Like Korea, Brazil was clearly one of the emerging market economies large enough to have a systemic impact. As market pressures mounted on Brazil following the Russia shock, and once the presidential election was safely won, the Cardoso government finally turned to the IMF for support in October. Once again the international official community assembled a "show of force" package of $42 billion, comprising $18 billion from the IMF, $9 billion from other multilateral sources, and $15 billion from the bilateral sources. The G7 intervention to support Brazil was widely viewed as drawing a line in the sand to halt global contagion at the borders of a country too important to lose.

10. Initially set at parity to the dollar in June 1994 but without a fixed-rate commitment, the real promptly strengthened to 0.85 by September but in March depreciated to 0.90 under contagion pressure from Mexico. Thereafter it crawled slowly at an annual average of about 7 percent during 1996–98, within a minimal ±0.5 percent band.

The IMF-supported adjustment package was centered on fiscal adjustment and notably did not break the existing exchange rate anchor. Although the subsequent collapse of the real no doubt contributed to evolution in G7 policy against large interventions to support fixed exchange rates, it is easy to understand the rationale for the program at the time. Brazil's past experience had shown a large inflationary response to depreciation of the exchange rate, and there were reasonable grounds for fearing that floating the real would be an invitation to inflationary destabilization. It is just conceivable that the program might have worked, but the proximate cause of its demise was a domestic political unraveling in December when a renegade state governor threatened to default on state debt.

After a brief attempt in early January to devalue modestly (8 percent) and widen the band but slow the crawl, the government was forced to float the currency, and by the end of January it stood 40 percent below its end-December level. It is a remarkable indicator of the subsequent success of the Brazilian adjustment program that twenty months later the real was almost 15 percent stronger than at its trough at the end of February 1999. Currency overshooting was curbed by tight monetary policy and fiscal adjustment, rather than being allowed to explode into a spiral of domestic inflation and further depreciation, as many had forecast at the time. Moreover, in part because Brazil's domestic banking system was relatively strong (Brazilians insist with justification that they experienced a *currency* crisis, not a *financial* crisis), Brazil's economy did not plunge into deep recession like those in the East Asian crises, although it experienced a second year in a row of near-zero growth before rebounding to growth of about 4 percent in 2000 as real interest rates fell sharply.

The story of private-sector involvement in resolving Brazil's crisis is highly illuminating on the delicate balance of confidence and psychology that permeates capital market relationships. Perhaps the most remarkable aspect of this story is that Brazilian authorities from the start were extremely reluctant to become involved in any arrangement that had the appearance of a 1980s-type rescheduling or concerted lending operation. Like Mexico, Brazil had simply paid too dearly during the 1980s to rebuild its credit reputation and reenter capital markets to be willing to throw away the credibility it had built up by suddenly putting the squeeze on creditors.

A luncheon for senior representatives of major banks in New York in November 1998, illustrates the point. At this event, organized by Citigroup's William Rhodes, a key figure in the restructuring programs of the 1980s and early 1990s and in Korea's 1998 loan conversion program, Brazilian Finance Minister Pedro Malan, and IMF Deputy Managing Director Stanley Fischer set forth the new Brazilian program. At the end of the presentation, most participants expressed the willingness of their institutions to hold credit lines. However, there was no explicit request by the Brazilian authorities for them to do so in an organized fashion.

By late January and through February and early March, nonetheless, Brazil was in acute currency crisis. Many analysts were convinced that Brazil's public debt was spiraling out of control. Continued payments pressures had pushed currency overshooting even further (with the end-February rate about 5 percent below that at the end of January). The time had come when a crucial boost to confidence was needed in the form of a more organized response. In March, in conjunction with a revised IMF program and in an environment in which a congress shocked by the currency collapse had finally moved to take important fiscal measures, the international banks agreed to a voluntary arrangement providing for the maintenance of trade and interbank credit lines, amounting to some $25 billion.

There was some ambiguity in the extent of the arrangement, which some announcements specified as holding through July but which some individual bank participants instead emphasized was strictly contingent on Brazil's meeting its policy obligations. Nonetheless, there was a strong boost to confidence from the signal that the international banks would hold lines, and the currency began to regain some of its losses. Brazilian authorities coordinated with the IMF in maintaining updated data on exposure of international banks, information that was communicated to national banking authorities, but it would appear that this process at most played an informational role, giving some measure of assurance to banks in various countries that their counterparts in other countries were continuing to honor the initiative, rather than serving as a vehicle for heavy-handed enforcement by the official sector.[11] Once again there was no legal restriction against banks' running down their credit lines, nor any corresponding exchange controls. Once again, some of the smaller banks exited.

By April 1999 Brazil had begun a surprisingly prompt return to capital markets. Several large Brazilian firms had reentered the international bond market, and by the end of April the government had issued a sovereign Eurobond for $2 billion (at a spread of 675 basis points). Consider a counterfactual in which instead Brazil, the IMF, and the G7 had all decided in October of 1998 that Brazil should ask its bondholders and bank creditors to reschedule their claims, along the lines of 1980s debt reschedulings but this time embracing some rescheduling of bonds, or an exchange operation for them. It is almost inconceivable that if Brazil had chosen this course, it would have been back to the market by April of 1999. Brazil is perhaps the clearest case for the superiority of voluntary arrangements for private-sector involvement in crisis resolution over dirigiste alternatives. Brazil's authorities were right to be highly reluctant all along to be seen as seeking any type of a coercive rescheduling.

11. Such information sharing has the property of overcoming the key obstacle to collective action in the "prisoner's dilemma" negative-sum game, the fact that each prisoner questioned in isolation does not know whether his accomplice has confessed.

6.1.5 Debt Workouts in More Severe Cases

Mexico, Korea, Brazil, and to a lesser extent Thailand serve as the classic cases for successful adjustment and restoration of confidence and market access, made possible by large official intervention, forceful domestic policy corrections, and (in Korea and Brazil) some arrangement for voluntary or quasi-voluntary private-sector participation. Some other conspicuous cases have been less successful, largely because they were further to the right along the horizontal axis (insolvency probability) of the Bagehot curve. In some underlying sense the proper way to organize private-sector involvement is less interesting in such cases, because from the private creditor's viewpoint this is broadly a question of "choosing one's poison." Most of these cases involve some form of rescheduling or exchange of instruments, and these involve a discontinuous breach of a key threshold in terms of credit reputation rather than slightly more intense versions of the voluntary arrangements. Even so, there is interest in identifying what types of approaches may be less unfavorable than others. The common thread among the workout cases is a more profound domestic political incoherence than in the illiquidity cases discussed above, even though political strains played important roles in those crises as well.

Indonesia

Although Indonesia had many financial and macroeconomic distortions of its own, its financial crisis was sparked by contagion, as the country was forced to let the exchange rate fall 14 percent in August 1997 one month after Thailand devalued. The crisis was slower to develop, but ultimately much more profound than those of regional neighbors. Within a year the currency had lost 85 percent of its value. Although a modicum of stability had been restored by then, political disarray and recurrent bouts of currency instability have continued since. As an example of the salience of political factors, an exodus of capital of ethnic Chinese families and businesses as the Suharto era came to a close was a major source of pressure. Similarly, regional separatist strife, intense factionalism, and doubts about whether Suharto-related interests will cede power peacefully have hindered restoration of confidence.

A key feature of Indonesia's external debt was that the bulk of debt to private creditors was owed by the domestic private sector: banks and corporations.[12] This meant that when domestic firms faced extreme losses, as they did with the shocks from sharp currency devaluation and to some extent high interest rates, the question was not so much whether the Indone-

12. At the end of 1997 the government owed $60 billion in external debt, but this was almost all to official sources ($19 billion multilateral, $41 billion bilateral). In contrast, domestic corporations owed $66 billion, and banks owed $17 billion (IIF database).

sian government would orchestrate a special arrangement (even though it did) but whether foreign creditors could effectively realize what was left of their claims by pursuing domestic bankruptcy procedures. It soon became evident that lax bankruptcy laws and, especially, enforcement, meant that the latter course was not effective.

In October 1997 the government abandoned its longtime policy of avoiding IMF support and entered into an agreement providing a total of about $34 billion, of which $10 billion was from the IMF, $8 billion from the World Bank and Asian Development Bank (ADB), $5 billion from Japan and Singapore, and $3 billion from the United States. By early 1998 the government was widely seen as not delivering on its policy adjustment commitments, however, and instability intensified through May when Suharto resigned. The policy slippage meant that by mid-1998 only about $4 billion in official disbursements had actually occurred (IIF 1999c, 54). In 1998 GDP fell by 13 percent.

Private-sector involvement in resolving the crisis was unlikely on a voluntary basis under these circumstances. One key government decision was whether to guarantee domestic bank debt, including debt to foreign creditors. After severe capital flight following the closure of sixteen banks in November 1997 with minimal guarantee of depositors and creditors (a decision urged by the IMF, apparently in its concern to avoid the moral hazard seen to have occurred in Thailand), the government was forced to guarantee the rest of bank obligations.

Still, the bulk of private foreign claims was on corporations. Here, the government made the key decision that it would not socialize the debt (unlike the partial socialization of similar private obligations in Mexico in the early 1980s under Fideicomiso para la Cobertura de Riesgos Cambiarios [FICORCA]). Instead, it set up an umbrella organization for private debt workouts (Jakarta Initiative and the Indonesian Debt Restructuring Agency [INDRA]) offering only a minimal mechanism for hedging exchange risk on repayments. Although in principle this detached posture was unexceptionable and was consistent with minimizing moral hazard, when applied in a sociojuridical context of minimal capacity for creditor bankruptcy recovery, and following a government-sponsored temporary pause in debt servicing in early 1998, the result in practice was widespread default and prolonged arrears. Even so, about half of foreign claims on domestic corporations were on subsidiaries of multinational firms, and this half has largely been serviced. Of the other half, owed by Indonesian firms, the great bulk still remains in default, despite frameworks providing for mediation and some tax and other incentives for restructuring. The weakness of bankruptcy mechanisms, and hence the lack of debtor incentive to reach agreement, has been the basic reason.

With the eventual help of substantial foreign assistance, reduced political uncertainty after presidential elections in the third quarter of 1999, and

higher oil prices, the Indonesian economy managed to halt the plunge of output by 1999 and returned to modest growth in 2000 (but with output still far below 1997 levels). The environment of lingering defaults means, however, that rather than returning quickly to normal capital market access, Indonesia has continued to face negative net flows of bank and nonbank lending (IIF 2000a).

Russia

Russia's crisis in August 1998 was much more the consequence of protracted failure to address structural economic distortions than a sudden liquidity crisis precipitated by external contagion. A succession of IMF programs of economic adjustment and reform starting in 1992 had failed to address the core problems of chronic fiscal weakness, large capital flight, weak property rights, and dominant influence of interest groups ("oligarchs"). Foreign investors had nonetheless pursued the high returns in ruble treasury bills (GKOs) and a surging stock market through mid-1997, in part because of the belief that G7 governments could not afford politically to let Russia fail. Increasingly these returns, and especially IMF programs premised on continued private foreign financing of large fiscal deficits, had "Ponzi scheme" characteristics of unsustainability. Thus, by mid-1998 treasury bills were yielding over 60 percent even though the official exchange rate crawl was minimal.

Pressure on Russia began to mount in the fourth quarter of 1997 as some contagion from East Asia did contribute to a decline in equity and government bond prices, and by the first half of 1998, a drop in oil prices aggravated prospects. It became increasingly doubtful that the government would be able to roll over its short-term external debt, which was more than twice as large as external reserves. In July a new IMF agreement was reached, providing for $17 billion in support, but even the first tranche was curtailed because the Duma had failed to pass key fiscal reforms. Some in private markets also doubted the seriousness of the program, in part because it delayed fiscal adjustment until the following year and was premised on continuation of private capital inflows. As capital market pressures continued, Russian authorities sought additional support, but G7 authorities were unprepared to do more because of the absence of a sufficient Russian political consensus for reform. In mid-August the government devalued the ruble, unilaterally restructured its domestic (GKO) debt, suspended payments (and soon defaulted) on former Soviet debt (which had already been rescheduled in 1997), and froze payments on private-sector external debt and forward exchange contracts.

The workout that followed was lengthy and often acrimonious. The government seemed to give preferential treatment to domestic holders of GKOs, for example, by allowing domestic banks to use them as collateral against new loans from the central bank. By mid-1999 negotiations had de-

veloped within a "London Club" framework, with the commercial bank structure from the past somewhat extended to include investment banks. Such financial institutions as asset managers and mutual funds, which held a sizable amount of the obligations, were not at the negotiating table.

Russia reached agreement with the London Club by early 2000, in a context of increased political cohesion with the replacement of Mr. Yeltsin by Mr. Putin, and on the strength of the sharp upswing in world oil prices and hence Russia's fiscal prospects. The present value of former Soviet debt was cut by about 30 percent (but upgraded to government debt instead of obligations by Sberbank). Critics of the process pointed to the lengthy negotiations that had been required. However, the negotiation process did require that the Russian authorities formally take into account the views of the creditors, or at least some of them. In contrast, the "unilateral exchange offers" in other recent cases (Ukraine, Ecuador) did not do so.

By the third quarter of 2000, Russia's economy had shown surprising strength, with GDP likely to grow 6 percent or more for the year. Spurred by import substitution, growth the previous year had reached 3 percent, following the economy's 5 percent decline in 1998. Russia also managed to avoid the hyperinflation some had feared in the event of devaluation and default, as a consequence of severe wage compression, a freeze in utility prices, tight economic policy, and the fact that a collapse of domestic banks contributed to curbing the money supply. The economy's recovery in 2000 was closely linked to that of oil prices, however. Large capital flight has continued (at rates of $20–25 billion annually in 1998–2000), and net private capital inflows—which reached a peak of $37 billion in 1997—collapsed to near zero by 1999 and less than $2 billion (mainly direct investment) in 2000. Although more fundamental factors such as insufficient enterprise restructuring would have constrained Russia's economic performance in any event, tougher conditions on earlier international support to prompt faster reform and—especially—a more cooperative approach to external debt restructuring might have left Russia in a much stronger economic position, and one much less dependent on strong oil prices.

There is little doubt that Russia's default in August 1998 marked a negative watershed for emerging markets more generally. For the first time in the decade, a major emerging market economy defaulted and sought sovereign debt forgiveness, rather than merely entering a period of illiquidity and taking forceful adjustment measures to restore confidence. The spillover is evident in lending spreads. Thus, the JPMorgan Emerging Markets Bond Index (EMBI+) index of spreads on Latin American bonds, which stood at about 500 basis points in mid-1998, surged to 1,500 basis points in August 1998 with Russia's crisis and did not fall below 1,000 basis points until November 1999 (IIF database).

As for lessons from Russia for private-sector involvement, the main one was that even geopolitical salience was no assurance against collapse. Any

lessons about the optimal approach to postdefault workout are at best ambiguous. A more fundamental lesson is that the most certain way to assure private-sector involvement in crisis resolution—unilateral default—is also the worst way to do so, if the country seeks early reentry to capital markets.

Ecuador

Ecuador's persistent political problems were not unlike those of Indonesia and Russia. One president was ousted by the legislature in 1997 on grounds of "mental incapacity"; another was deposed in a brief military coup in early 1999. There have been sharp political divisions among interior ("altiplano"), coastal, and indigenous-group interests. In the past two years, there have been four different finance ministers.

Spillover from Russia in late 1998 compounded Ecuador's economic difficulties that year from El Niño weather damage as well as low commodity prices. A growing fiscal deficit and legislative resistance to fiscal correction added to the adverse investment climate. As external credit dried up, the currency depreciated sharply, external reserves fell about two-thirds from mid-1998 to early 1999, and interest rates reached 80 percent and more (compared to inflation that reached about 40 percent). With increasing problems in the banking sector, by March 1999 the government froze bank deposits.

It was in this environment of economic unraveling that the IMF appears to have chosen to make Ecuador a guinea pig[13] for a more aggressive approach to bailing in private creditors. There had been escalating political pressure within industrial countries to stop bailing out private creditors, and the public sector appears to have been tempted to try out new approaches on smaller countries where the systemic consequences would be limited if the outcome proved adverse.

Arguably, Ecuador might have been able to avoid default on Brady and Eurobonds. Out of $1.7 billion in principal due on public-sector external debt over 2000–01, only $38 million was payable on Brady bonds and none on Eurobonds (Ecuador 2000, 83). Of the $1.5 billion due in interest, $606 million was payable on Brady bonds and $110 million on Eurobonds. Thus, these two sources of private claims comprised only 23 percent of public external debt service due over this period. In contrast, principal and interest payments to the IMF and other multilaterals accounted for 54 percent, and those owed to governments represented 16 percent. Debt service to commercial banks and on suppliers' credits comprised the remaining 7 percent.

Public debt service due on Brady and Eurobonds in 2000–01 amounted to only about 6 percent of prospective earnings on exports of goods and services, and a forceful adjustment program coupled with IMF support and Paris Club relief might have sufficed to turn around private investor confidence. However, by the second quarter of 1999, Ecuadoran authorities ap-

13. This is the term one of the more senior members of the board of directors of the IMF used in private discussions more than a year later.

pear to have been under the impression that IMF and Paris Club support would only be forthcoming under circumstances in which Brady and Eurobond payments were also restructured.[14] In terms of what is on the public record, in effect the IMF blessed the concept by approving in principle a September 1999 standby agreement with Ecuador that was premised on the cash-flow outlook that included the restructuring of these instruments.

The notion of restructuring Brady bonds seemed curious at the time. It involved questions of equity, considering that holders had already forgiven 40 percent of their original claims when Ecuador reached a Brady deal with foreign banks in 1995. It also raised questions of public-sector memory, considering that the instrument itself had been designed to resolve the 1980s debt problem through a promise of exchanging a new secure instrument for earlier bank claims, trading off part of the claim in return for the reduced risk.[15] The official sector's decision to sanction Ecuador's default and restructuring of Bradies represented, consciously or otherwise, a decision to exterminate this type of instrument as a credible option for use in future crises.

At the end of August 1999 Ecuador did default on part of its Brady debt, and a prompt move by holders to "accelerate" quickly derailed the hope that this debt could for a time be serviced out of its rolling interest collateral, with the effect of escalating the default to all types of Brady debt as well as Eurobond debt. In part because Ecuador's economic policies were in disarray and the IMF program was delayed, far from enjoying a respite, the country experienced an intensifying economic crisis. By March, 2000 the new finance minister had declared the decision to default a "catastrophic error" (Reuters Market News Service, 28 March 2000).

The impact on emerging markets more broadly was modest at worst, although the default did appear to widen the spread between Brady bond spreads and those on other obligations. In broad terms, the capital markets treated Ecuador as a quarantined case rather than a harbinger for such countries as Brazil and Argentina. Nonetheless, the episode has left a sour taste among many in the private sector that has curbed the appetite for lending to countries where there could be "international financial institution risk" because of potential Paris Club pressure for comparability or IMF pressure for private rescheduling where multilateral claims bulk large.[16]

The particular workout modality eventually chosen by Ecuador, once it

14. Based on numerous discussions, including one with a ministerial-level Ecuadoran official.

15. Brady bonds typically forgave 35–40 percent of original claims, in exchange for a thirty-year bullet principal guarantee using U.S. Treasury zero-coupon bonds as collateral, along with collateral against twelve to eighteen months' interest due. The collateral has typically been in escrow with the New York Federal Reserve Bank.

16. Referring to the recent "bail-in risk," a representative of a major asset management company stated to the 2000 Annual Membership Meeting of the Institute of International Finance that his institution was no longer willing to undertake exposure in countries where IMF and Paris Club claims are relatively large, and observed that the heightened risk from official bail-in pressure had done major damage to second-tier emerging market economies.

had made the decision to default, was the unilateral exchange offer. In this approach, the country and its investment banking advisors informally take soundings of major holders of the bonds in question to arrive at an offer they consider to have a good chance of being accepted by a critical mass of, say, 85 percent or more. This "exchange of instruments" circumvents the array of difficulties likely to be involved in an attempt to enter into negotiations with bondholders on rescheduling the obligations due under the existing instruments.

In Ecuador's case, the exchange offer was designed "to provide participants with a significant pick-up in market value over the current trading prices of their Existing Bonds" (Ecuador 2000, 3).[17] It involved a 40 percent cut in the face value of Brady bonds, but with a significant offset of a partial immediate cash payment. Thus, $3.9 billion in new bonds (mostly thirty-year), plus cash payments of about $1 billion (of which about one-third was of arrears), were exchanged for $6.6 billion in (mainly) Brady and Eurobonds.

Although the exchange offer was well received, in that some 97 percent of holders accepted (well above the 85 percent threshold sought by the government), questions remain about this modality. Some substantial institutional holders of the bonds were not consulted in the preparation of the exchange offer. Like other exchange offers, it was essentially "preemptive" in nature, with only two weeks allowed for bondholders to respond to the offer. In such circumstances there is a take-it-or-leave-it dynamic that tends to make the high incidence of acceptance somewhat misleading as an indication of creditor attitude.

By the time of the exchange, Ecuador had made a somewhat more promising start on its program of dollarization than might have been expected, and a new IMF program had been adopted (in April). Including other multilateral lending, the support program amounted to $2 billion over three years, or 14 percent of one year's GDP. High oil prices have also helped the economy. However, unless the country's internal political environment shifts toward greater coherence, making possible more sustained fiscal adjustment and progress on banking-sector and other structural reforms, Ecuador could face renewed difficulties despite the debt restructuring and official support. For their part, private creditors would seem unlikely to return to the country soon, having been burned twice.

Pakistan, Romania, Ukraine

Three other recent cases warrant review as instances in which the public sector has pressed governments to restructure obligations to private creditors, or otherwise to press them to participate in crisis resolution.

17. In the event, market prices of Ecuador's Brady bonds rose on average by about 20 percent following announcement of the offer.

In early 1999 the Paris Club told Pakistan that its comparability of treatment principle would require that Pakistan restructure its sovereign bonds in order to obtain rescheduling of bilateral debt. These included a total of about $600 million in notes due in 1999 through 2000. At the time there was concern that this prospective first instance of Eurobond rescheduling would cast a severe pall on the international bond market. As it turned out, Ecuador's default preceded Pakistan's exchange offer. Although both probably had some adverse effect on international bond markets, the effect was at most modest.

In November 1999, Pakistan offered to exchange its bonds for others to mature in 2002–05, bearing 10 percent interest. More than 95 percent of holders accepted the exchange offer by the closing date in late December. One reason for the favorable response is likely to have been that the exchange did not seek forgiveness.

Pakistan's use of the exchange offer modality was informative, because its bonds were under U.K. law and so could have been rescheduled with consent of a qualified (high) majority of holders. In contrast, bonds under U.S. law typically require unanimous consent. As discussed below, the issue of requiring qualified majority rescheduling clauses in bonds has been one of the more prominent in the debate on involving the private sector; yet it seems to have been irrelevant in actual practice in the Pakistan case.

Romania managed with great effort (exchange rate depreciation and fiscal tightening that induced resident capital reflows) to pay off some $700 million in Eurobonds due in the second quarter of 1999. However, the IMF program that restarted in July of that year had as a condition that the country mobilize $450 million in new private-sector inflows. This was not in the context of Paris Club comparability, because Paris Club debt was small and there was no rescheduling in prospect. Instead, the condition reflected the intensifying pressure at the time for inducing private-sector "burden sharing."

After the release of an initial tranche of about $80 million, the IMF program was suspended in September because Romania only managed to arrange about $100 million in a one-year club loan from fourteen banks, far below the target, and also because of disagreement on the 2000 budget. However, by June 2000 the IMF agreement was renewed, with the IMF citing "the large reduction in the current account deficit [and] the sharp correction in the fiscal deficit" as grounds for the reinstatement of the $535 million standby program. At the same time, the government paid off the club loan of June 1999 and announced it would also pay off another club loan of $64 million dating from December 1999.[18] Repayment without announcement of other new initiatives for private support signaled that the new IMF agreement was no longer conditioned on a burden-sharing target for

18. Data from Reuters: Rompres news agency 13 June 2000; Rompres 27 June 2000.

private-sector involvement. This may have represented a straw in the wind indicating that the IMF considered its series of small-country experiments in this direction during the preceding year as less than successful.

In early 2000 in the face of a severe external payments problem reflecting in part persistent fiscal imbalance, Ukraine suspended payments on its external debt except that owed to multilateral institutions and announced its intention to restructure debt to private and bilateral creditors. In early February the government announced an exchange offer to convert $2.8 billion in bonds falling due in 2000–01 into new bonds with seven years' maturity and two years' grace and bearing 10–11 percent interest. The offer gave holders until mid-April to respond. The response was favorable and met the 85 percent threshold.

Workout Lessons

The first feature that stands out in the list of workout cases just reviewed is that, in contrast to the four success cases examined in the previous section, underlying economic strength and creditworthiness were generally far weaker. This amounts to an informal empirical verification of the Bagehot curve notion relating intervention policy to illiquidity versus insolvency: large, temporary official lending works to restore confidence when underlying creditworthiness is strong and the problem is a transitory shock; the opposite outcome of forced rescheduling is likely to be unavoidable where underlying creditworthiness is weak.

Table 6.2 provides evidence that supports the intuitive sense that the list of debt reschedulers and bond exchangers is populated by weaker

Table 6.2 **Institutional Investor Country Risk Rating**

Country	Date	Rating	Global average
Mexico	Sept. 1994	46.1	37.5
Thailand	Mar. 1997	61.1	40.1
Korea	Sept. 1997	69.7	41.0
Brazil	Sept. 1998	38.0	41.1
Average		53.7	n.a.
Indonesia	Mar. 1997	51.6	40.1
Russia	Mar. 1998	31.2	41.2
Ecuador	Mar. 1999	25.5	40.1
Pakistan	Mar. 1999	20.4	40.1
Romania	Mar. 1999	31.2	40.1
Ukraine	Sept. 1999	18.7	41.5
Average		29.8	n.a.

Source: Institutional Investor, various issues. Average rating for all countries included in *Institutional Investor* annual surveys.

Note: n.a. = not applicable.

economies than the list of countries that achieved a quick turnaround without major rescheduling. The table reports the country risk rating of the economy in question in the most recent semiannual compilation of the magazine *Institutional Investor* prior to the financial crisis in question. Running from zero to 100 (and with the United States rated typically at about 93), these ratings are based on a weighted survey of approximately 100 banks, asset management companies, and economists.

As expected, the average rating for the four success cases of major international support stands considerably higher, at 53.7, than that for the six workout cases,[19] at 29.8. The only anomaly is the case of Indonesia, whose relatively high rating probably represents the fact that many of the *Institutional Investor* survey respondents were referring to sovereign rather than general country risk, and Indonesia has not defaulted on its sovereign debt.

A crucial lesson from this dichotomy between two classes of country crises is that policymakers should not conflate workout-type solutions with market-resilient countries. Remedies that officials consider appropriate for an Ecuador would likely be inappropriate for a Brazil, because Ecuador's problem was much closer to insolvency than Brazil's, which was closer to illiquidity.

Among the workout experiences, an important pattern that seems to be emerging is the debtor preference for the "unilateral exchange offer" over rescheduling of the existing instrument, at least where the debt is primarily in bonds. In this approach the debtor "offers" to exchange a newly created obligation in exchange for the existing claims. At least in principle, the holder of the existing claim is not obliged to accept the new substitute instrument, but in practice the terms are set to make it likely that a large critical mass of existing claimholders will judge it prudent to accept the exchange instrument rather than holding out in hopes of forcing payment of the original claim instead. (This leaves ambiguity about whether a minority of holders refusing the exchange offer can collect on the original terms, and correspondingly leaves a risk of lawsuits by such holders.) Pakistan, Ecuador, and Ukraine used the approach of the exchange offer to swap new instruments for outstanding bonds. Russia used the alternative approach of a London Club negotiation, but much of its debt in question was to banks.

The remarkable speed with which the unilateral exchange offers have been completed shows that there is a major historical difference between dealing with bond defaults today and in the last major episode—the 1930s. Electronic communication today means it is easy to obtain prompt replies from thousands of bondholders, whereas lengthy delays were a problem in the 1930s.

19. Romania is not technically a workout case because it did not reschedule or exchange, but it is classed with the workout group here because it too was subject to an international official attempt at enforcement of private-sector burden sharing.

A potentially serious problem with the unilateral exchange offer, however, is that so far it does not seem to have been implemented in a manner that provided for widespread consultation with major holders. To some extent the risks associated with the lack of consultation have been mitigated by making the offer more attractive than terms consistent with the going secondary-market price. However, lack of consultation would seem to increase the eventual risk of lawsuits. It is too early to tell whether legal challenges will prove to be a drawback of the unilateral exchange offers.

One aspect of the rapid acceptance of the exchange offers has perhaps been that much of the debt in question had already been sold off to vulture funds and other speculative investors. For them, any increase in the terms from the secondary-market price equivalent might have been viewed as attractive. In terms of policy, however, it would be inappropriate to give much emphasis to this consideration as a basis for judging exchange offers (especially those involving forgiveness) as favorable outcomes. Essentially, the fulfillment of the obligation should be judged against its original value, not against the level to which it has fallen under distress.

Another pattern seems to be that the quarantine effect has dominated the contagion effect of small-country bond restructuring on the international capital market. There had been legitimate concern by mid-1999 that the official sector's seeming insistence on bond rescheduling in Pakistan and Ecuador would cause severe adverse spillover to the bond market generally for emerging market economies, because as a class bonds had not yet entered into significant restructurings. This de facto exempt status had reflected the small portion of debt owed in bonds in the Latin American debt crisis of the 1980s and, hence, the practice in that episode of rescheduling bank claims but not bonds. As it turned out, the Ecuadorian default and Pakistan's exchange did not cause a sudden and severe fallout for emerging market bonds globally. However, as suggested above, the persistence of relatively high bond spreads suggests that the official-sector pressure that contributed to the spread of restructuring to bonds may have slowed the pace of recovery in emerging capital markets.

The seeming ease of bond exchanges also contradicts the great concern in much of the debate on crisis resolution about the need for changes in official practice and even legal structure to deal with what had been perceived as severe obstacles to bond rescheduling, including such mechanisms as collective action clauses in bonds and "stay of litigation" powers for the IMF. These issues are addressed briefly below.

6.1.6 Rules, Case-by-Case Determination, and Principles

One of the central issues in international policy on private-sector involvement in crisis resolution has been the debate on whether there should be clearly codified rules about how the private sector should participate,

what the public sector will be prepared to do, and whether each episode should be handled on a case-by-case basis. Broadly, the Canadians and Europeans have tended to favor a rules-based approach, and U.S. authorities have tended to favor the case-by-case approach.

The search for rules of crisis resolution seems primarily to reflect the political backlash against what appeared to be large public support programs that bailed out private creditors. The type of rules that some in the official sector seem to have in mind are of the following sort: IMF and official support should not exceed normal magnitudes of, say, two or three times IMF quota; private creditors should reschedule if the Paris Club reschedules; private creditors should somehow contribute new money, or at least not be receiving net repayments, when public lending is taking place; and so forth.

There is an inherent problem in spelling out rules for private- and public-sector involvement in crisis resolution, which is essentially the problem of "time inconsistency." The crux of the problem is that rigidly preannounced policies may adversely distort future behavior, even if those particular policies might be appropriate to apply in an actual contemporaneous event. In central banking, for example, authorities are loath to spell out in a precodified set of rules that they will (or will not) support banks that are "too big to fail." If they specifically say they will do so, the result will be a marginal distortion toward ever larger and fewer banks. If they specifically say they will not do so, they encounter a problem of credibility loss when and if they do so in practice. Thus, it is difficult to imagine an effective set of rules written in advance that would have authorized the Federal Reserve Bank of New York to press large institutions to support Long-Term Capital Management in 1998 lest its collapse severely destabilize markets.

In short, rules will tend to be unduly constraining or send potentially perverse signals affecting future behavior. In contrast, debt crisis resolution has traditionally been handled on a case-by-case basis. This was the watchword of debt strategy in the 1980s, even if de facto a great majority of the case outcomes wound up looking very much like each other. A case-by-case strategy meant nothing was guaranteed, but nothing was excluded. Its framework allows for the "constructive ambiguity" that is helpful in central banking intervention.

A rules-oriented strategy could also undermine the Eaton-Gersovitz conditions for sovereign lending. If the rules book turned out to look like a relatively accommodating official framework for sovereign default, the consequences might be a few rounds of relatively comfortable defaults followed by a long stretch of minimal capital flows to emerging markets.

The appropriate resolution of this policy debate would seem to lie in recognition that (a) the case-by-case approach is inescapable; (b) it should nonetheless be applied within a broad framework of principles; and (c) efforts to spell out "rules" applying these principles are likely to be subject to the time-inconsistency problem and should be avoided.

The principles for private- and public-sector involvement in crisis resolution that are most likely to be successful in restoring and maintaining capital market access would seem to include the following broad precepts.[20] First, private-sector participation should be on as voluntary and market-oriented a basis as possible given the circumstances. Second, optimal public-sector involvement may sometimes involve much larger, temporary support than traditionally envisioned in IMF programs and can appropriately be extended at higher lending prices (as in the IMF's new SRF). Third, a judgment of the country's position along a continuum between a pure liquidity problem, on the one hand, and a fundamental insolvency problem, on the other, should be the main determinant of whether large temporary official support is offered or whether instead primary reliance is placed on restructuring private-sector claims. Fourth, no one type of private claims (such as bonds) should automatically enjoy exempt or senior status, although such factors as whether the claims have already been restructured (e.g., Brady bonds) or whether their disruption would undermine economic activity (e.g., trade credits) should be taken into account in designing an equitable and effective restructuring package. Fifth, private creditors bear responsibility for their own risks and do not expect the public sector to make good their losses. Sixth, however, the public sector should act forcefully when it is in a position to orchestrate a positive-sum outcome that benefits the economies in question and helps minimize creditor losses (and maximize chances of return to voluntary capital markets) at no or minimal expected cost to taxpayers. Seventh, where debt restructuring is unavoidable, the sovereign obligor should consult fully with the creditors.

Other principles can no doubt be added. In evaluating either principles or more detailed rules, it is important to go through the counterfactual exercise of seeing whether the global economy (and that of the country in question) would have been well served if the proposed approaches had been enforced in each of the major crisis episodes of the recent years. It would be counterproductive to adopt for the future rules that would have made things worse in the past, because similar episodes could once again confront policymakers, who would then be forced to choose between disregarding the rules and causing suboptimal outcomes.

6.1.7 Further Considerations

This paper has outlined the evolving structure of emerging capital markets, set forth the conceptual framework for policy toward involvement of the private sector in crisis resolution, reviewed the major crisis episodes of the late 1990s as well as the spate of more recent small-country workouts,

20. Also see IIF (2001), issued subsequent to the preparation of this paper.

and considered patterns as well as implications for the debate on rules versus case-by-case approaches. A handful of specific issues warrant further comment to complement this review.

Future Evolution of Lending Structure

There are increasing signs that the shift in emerging markets lending from banks toward bonds will continue. It is telling that even if the crisis economies are excluded (five East Asian economies, Russia, and Brazil), net bank lending to the other emerging market economies plunged from about $30 billion annually in 1996–97 to close to zero in 1998–2000 (Cline 2000a). In contrast, net bond and other nonbank lending to the noncrisis economies held up well, at an average of about $35 billion annually in 1998–2000 compared to about $43 billion in 1996–97. Similarly, the most recent forecasts of the IIF (2000a) place nonbank flows to major emerging market economies still ahead of net bank flows in 2001 (at $36 billion versus $16 billion, respectively), even though the rebound of the latter will finally turn them positive after three years of negative net flows.

There are two structural reasons why this shift may continue. First, increasingly the large international banks appear to be concluding that shareholder value is better served by concentrating on fee-based income of an investment-bank nature (e.g., helping launch and sell securities) than by traditional balance sheet lending. Although not limited to emerging markets, this phenomenon contributes to the shift away from bank claims toward bonds in these markets. Second, the inherently high leverage of banks (whose Tier 1 equity capital is only 4 percent of risk-weighted assets under the existing Basel rules) makes them potentially more subject to retrenchment in sectors where risk is perceived to have increased than is the case for less leveraged investors. The interaction of the escalation of perceived risk in emerging markets lending with the degree of leverage may help explain why bank lending to the noncrisis emerging market economies fell off much more than did nonbank (mainly bond) lending in recent years. As the heightened perception of emerging markets risk seems unlikely to disappear soon, the leverage consideration could continue to constrain bank lending to these markets.

Despite this likely evolution, banks could continue to play a key role in helping resolve short-term liquidity crises through initiatives to maintain credit lines, as in the Korean and Brazilian cases. The share of banks in short-term debt (including trade credit) is likely to remain considerably higher than their share in longer-term debt, and, as noted, the longer-term repayments owed to bondholders do not tend to be the proximate problem in short-term liquidity crises. Continued evolution toward bonds would, however, increase their role in the resolution of more intransigent crises where longer-term restructuring is necessary.

Bond Clauses, Stay of Litigation

This in turn raises the by now familiar issue of whether public policy should require the inclusion of "collective action" or rescheduling clauses in bonds, to facilitate their restructuring if needed. Some (e.g., Portes 2000) have emphasized that this is the key reform needed in emerging markets lending.

Recent experience seems to suggest, however, that the traditional arguments for this reform may no longer be compelling. Prompt communication to numerous, dispersed holders has effectively been carried out in the bond exchanges, suggesting that technology has superseded some of the informational and organizational problems of the past in bond restructuring. The exchange offers have also not been held up by rogue bondholders, and the approach of providing a new instrument in exchange for the existing bond appears so far to have successfully circumvented the difficult challenges that would have to be overcome in formal rescheduling discussions even where a qualified majority rather than unanimity is required.

There thus would seem to remain considerable weight on the main reason to avoid an international regime of mandatory rescheduling clauses for emerging market bonds: Generalized adoption of such clauses could convey the impression that the international official community would lean toward facilitating default when difficulties arise. This would tend to undermine the Eaton-Gersovitz dynamic of default pain as quasi-collateral and hence curb flows of new bond lending and increase spreads.[21] Instead, the flexibility provided by qualified majority bond rescheduling clauses could be obtained by those sovereigns that chose to include such clauses, probably initially at a spreads premium.[22]

For the same conceptual reason, incorporation into the IMF's Articles the authority to impose a stay of litigation, as suggested by former IMF Managing Director Michel Camdessus, would tend to undermine emerging capital markets. This innovation too would send a signal that default could be facilitated by the official sector. The same problem is inherent in most proposals to create some type of international agency to provide at the international level bankruptcy workouts analogous to those present domestically. Such proposals typically fail to recognize the fundamental difference between bankruptcy recovery potential where there is tangible collateral and where there is not.

21. See Cline (2000b) for an interpretation of the results of Eichengreen and Mody (2000) that concludes their empirical tests on U.S.- versus U.K.-issued bonds should not alter this view.

22. The call to G7 countries to include rescheduling clauses in their own sovereign bonds as a means of removing any special stigma to emerging market governments' doing so seems highly unrealistic and would be especially troublesome for such countries as Japan, where public debt has escalated sharply relative to GDP.

Contingent Lending Arrangements

One of the instruments that at first looked promising as a mechanism for involving the private sector in crisis resolution has made little progress in the past three years: contingent lending arrangements. Under such arrangements, the country pays a commitment fee for assured access to credit up to an agreed amount in the event that the country wishes to draw on the credit. Mexico and Argentina have been the most conspicuous cases of such arrangements, but Mexico drew down its line of credit in September 1998 (to considerable acrimony from bank creditors, who felt that by then the terms were too generous; for a discussion see IIF 1999c, 35–36) and has not replaced it.

The underlying calculus of contingency financing would seem compellingly advantageous for a country that could thereby reduce the probability of a financial crisis, simply because small changes in that probability would be operating on a large economic base (GDP). It may nonetheless be difficult politically to enter into contingency financing arrangements in which creditors insist on particularly high spreads if the line is drawn upon. Perhaps a more fundamental reason why contingent credit lines have not thrived is that many countries have shifted from fixed to floating exchange rates and have run off the high short-term debt that was more typical prior to the crises of the late 1990s. An economy with a floating exchange rate and low short-term debt is less likely to need, or benefit from, additional liquidity from contingent credit lines. Correspondingly, it may be no accident that the principal such arrangement currently remains that of Argentina, which not only has a contingent line of about $7 billion with about a dozen banks, but also has a rigidly fixed exchange rate under its currency board.[23]

6.1.8 Conclusion

It has been said that farmers should know the difference between shearing their sheep and slaughtering them. Involving the private sector in crisis resolution is the art of knowing this type of difference. Too heavy a hand by the official sector to force private-sector involvement can transit quickly into a once-for-all zero sum transfer from the creditor to the debtor followed by a persistent cutoff in future credit. The opposite extreme of com-

23. For its part, the official-sector Contingent Credit Lines facility created in 1999 for prequalifying countries with strong policies has remained dormant. The central problem seems to be that even after qualifying and signing up for the facility, a country might subsequently not be able to receive funds from it because at the time of request its policies would be judged to have deteriorated; or, worse, the country might be disqualified from the facility, prompting heightened market concerns upon notice of the disqualification. It is unclear that changes adopted in the facility in September 2000 (making the degree of monitoring less intensive than under other IMF facilities and providing more automatic access in the event of a crisis) will suffice to attract entrants, because the risk of disqualification remains.

plete laissez-faire toward private creditors coupled with major official support invites public criticism that the official sector is bailing out private creditors.

Given the salient role of mobile capital in modern capital markets, it is crucial for authorities to distinguish between cases of transitory illiquidity and those of more protracted insolvency. In the former, the Bagehot principle of lending in large volume if necessary to stem a panic should be applied. It is encouraging that the IMF now has the SRF, which is designed to do just this. In such cases of illiquidity, it may be necessary to enlist private-creditor participation through such mechanisms as the arrangement of the international banks to maintain short-term credit lines in the second quarter of 1999 during Brazil's crisis. In general, the more voluntary and market-oriented this or other participation of private creditors, the better the chances for prompt reentry of the country into international capital markets. Where more severe debt problems make rescheduling or restructuring inescapable, more flexible arrangements such as exchange offers are likely to be preferable to mandatory reschedulings.

The cases of Mexico, Korea, Brazil, and to a lesser extent Thailand show that decisive international official support combined with adjustment of macroeconomic and structural policies and relatively voluntary mechanisms for private-sector involvement can restore confidence and market access. In a series of smaller-country defaults in 1999, however, the public sector seemed to be veering more toward mandatory approaches that could increasingly impose perceived "international financial institution risk" in these markets. Similarly, increasing calls for clear rules of action run the risk of a failure to recognize the inherent need for creative ambiguity in official intervention, a lesson well known under central banking principles.

Although the emerging capital markets have managed to begin a recovery from the sharp retrenchment of 1998–99, it will be essential that public policy move in a sophisticated manner on the issue of private-sector involvement in crisis resolution if these markets are to strengthen and provide the capital so crucial to global economic growth in the future.

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2. Guillermo Ortiz

Well, knowing that by this time pretty much everything that had to be said about financial crises in emerging markets has been said and repeated, Martin Feldstein asked me to say a few words about the experience of Mexico regarding the restoration of creditor relations. I would like to frame this in a more general discussion of restoring credibility after the crisis. As you may recall, Mexico maintained a very close relation with the investment community throughout the 1990s. In fact, it was the Mexican Brady Exchange of 1989 that really started a whole asset class of investment in emerging markets. A few years later, the privatization of Telmex around 1990–91 was a benchmark in developing interest among investors who were not previously engaged in lending to emerging markets. In fact, during the years 1990–94, between one-half and two-thirds of all portfolio flows to emerging markets went to Mexico.

As you may remember, the Mexican crisis of 1994–95 caught the financial community by surprise. Although there were certainly some ominous signs—all the events of 1994, the political assassination of Colosio, and so on—it was a real surprise. The timing was really bad: it was right before Christmas, so investors felt badly deceived by the authorities' decisions, first to raise the band, and then to float the currency. Thus, the immediate reaction of course was a complete loss of confidence in the authorities, and it soon became apparent that the situation that we were facing was very different from previous episodes of balance-of-payments problems.

It was the first of a new generation of crises that would reappear with a vengeance years later in Asia, Russia, Brazil, and other countries. In all these cases, as we discussed yesterday, there are common features, like the buildup of short-term obligations by the public sector and by the banking

sector due to rapid credit creation; currency and duration mismatches in balance sheets; and, in general, a weakened situation of the banking system's regulation and supervision. In all these cases, as was amply discussed yesterday, fixed exchange rate regimes were subject to speculative attacks.

Another common feature of these cases, as I mentioned, was a loss of confidence in the financial authorities. In the case of Mexico, despite the fact that economic fundamentals were reasonably good, except perhaps for a large current account deficit, the magnitude of amortizations that we were facing in 1995 prompted what became eventually the worst crisis in the country's history.

It didn't take us very long to realize what was going on. In the first days of January, as I recall, we had a meeting—a huge meeting—in New York, at the Pierre hotel, to be precise. There was massive attendance, and I can tell you that people were extremely upset. We came out with a program that had been negotiated with the main sectors of the Mexican economy in the "pacto" system with the workers, entrepreneurs, and so on. The first reaction to the presentation of this program in 1995, surprisingly, was not very bad. In fact, following the presentation, we had a positive initial response from the markets; the exchange rate went up, and the stock market also responded favorably. I remember calling Larry Summers that night and thinking—this was 5 or 6 January—1995—that we had gone over the bridge, that we had had a very good start in the process of confidence restoration. Next morning, as I was leaving for Mexico City, I got a call on the phone and they told me the markets were in havoc again. Apparently, the interbank credit lines of some Mexican banks had been discontinued, the banks were buying in the foreign exchange markets, and the whole picture changed right away. So, instead of flying to Mexico, I flew to Washington. That afternoon, there was a meeting with the managing director of the International Monetary Fund (IMF); then there was a meeting at the U.S. Treasury. I don't know, David, if you remember those hours in which the Federal Reserve took stock with the treasury and ourselves. We started doing some rough back-of-the-envelope calculations of what was the amount of amortization due in 1995, and it came out to pretty staggering amounts. We were running a current account deficit of about 7 percent of gross domestic product (GDP)—that was about $40 billion. Plus we had another $35 billion worth of *tesobonos* and about $7–8 billion of sovereign debt due, and amortizations of private debt for another $40–45 billion. So the number was pretty big, as we sat there.

Anyway, I will not tell you the details of the meeting, but we realized that the strategy had to have two main elements. One was to put in place an adjustment program that would reduce the financing needs of Mexico in 1995 and cut the current account deficit. The other was to put sufficient money up front to reassure markets that Mexico would be liquid and would meet

its obligations. This is what was done: In a matter of weeks we negotiated a program with the IMF, although at first there had been an initiative on the part of the United States to guarantee Mexican sovereign debt for $40 billion, which was shut down in the next few weeks in Congress when it came to committees. By the end of January, the whole package was pretty much finished, and in February we signed it with the treasury, the fund, everybody. We got commitments for about $50 billion at the time. Thus, the key, of course, was to restore confidence as soon as possible because, given the numbers I just mentioned to you, the $40 or 50 billion was insufficient to cover all the amortizations if we did not regain access to capital markets. The key was—the *bet* was—that strengthened economic fundamentals and sufficient money up front would do the trick. This is exactly what happened. We were able to re-access capital markets six months later, we repaid the U.S. Treasury fully in 1996–97 (several years ahead of schedule), and recently we finished paying the IMF.

However, there was a third element that was important in this whole story, and this element was that it took a lot of confidence of the markets in the authority. As I mentioned, investors felt betrayed because they felt that they had been assured by authorities in those early days that there would be no movement of the exchange rate. Thus, we had to put up a strategy, apart from the financial adjustment package, to try to regain market confidence. We hired an investment firm in those days and got advice from some friends, some of whom are sitting at this table, and we set up what was called an investor relations office at the Ministry of Finance. This investor relations office had as its main function to be a vehicle of communication with market participants, investors, analysts, and rating agencies. We started doing quarterly conferences, televised or telephone conferences, with the investor community. We designed a web page around mid-1995 and also organized several visits to be close to the investment community. This was essentially the effort that was undertaken by the Finance Ministry and that has been kept up. Every quarter, the minister of finance has to present a report to Congress on the state of public finances and the state of the economy. Also, a teleconference with investors around the world is held, and fact statistics are sent out. The funds and investors that have been active in Mexico get regular information and can access what they need through the Web. I think this is, in a nutshell, what was done after 1995.

Let me now make a few comments about what happened at the Bank of Mexico, because the Bank of Mexico also suffered a massive loss of confidence after the devaluation. The first task was to provide sufficient information to the markets. Mexico was accused after the devaluation of 1995 of hiding information and of not being sufficiently transparent. The Bank of Mexico was accused of publishing reserves information only three times a year. That was true, but the Bank of Mexico had been doing that for forty

years, and it only became an issue after the crisis. We were accused of hiding information on the *tesobono.* However, the *tesobono* holdings data were published every week, but nobody seemed to look at it except after the crash in December. Nonetheless, the Bank of Mexico engaged immediately in a policy of transparency and started publishing on a weekly basis the main items of its balance sheet, the monetary base, the position of commercial banks at the central bank, and the open market operations intended for each day. That became another leg of the transparency effort on the part of the central bank.

The second important task was designing a monetary policy that would substitute for the loss of the exchange rate as an anchor when we started floating. In the first stage, what the Bank of Mexico did was to follow monetary aggregates and target the monetary base, which was the initial anchor chosen by the Bank of Mexico. However, as inflation started coming down, the relation between the narrow monetary aggregate, or even broader monetary aggregates, and inflation was pretty much lost, so in 1998 we started switching to inflation targeting. As Arminio Fraga said yesterday, inflation targeting is one of the only two games in town. In my view, when you are trying to substitute for a nominal anchor that used to be the exchange rate, inflation targeting is a very good marketing device that allows the central bank to communicate and, one hopes, to regain more credibility. The main elements of this inflation-targeting regime are, first, the annual objectives we have. We have been targeting an inflation of 3 percent for 2003, and last week we published intermediate targets for 2001 and 2002: 6.5 percent and 4.5 percent, respectively. It helps that, for two years running, we have been complying with our own targets. For example, this year the target was 10 percent, and we'll be hitting something like 8.8 or 8.7 percent.

There are other operational details of inflation targeting that I will not go over because I have only a few minutes left. Let me turn now to talk a little bit about the second part of the subject, which is the participation of the private sector, and I will be very, very brief and perhaps not very thorough in what I'm trying to say. I think that the way Mervyn King put it yesterday in terms of having two choices, either lender of last resort or some sort of workouts in the context of the discussions that we have been holding, is pretty much the right approach. In the cases of Mexico and other countries where we clearly had a run in the initial stages of the crisis, the crisis was provoked by the capital account, by the financial sector, and the like, all the elements that we can put together. The establishment of an up-front, very substantial package by the international community, especially including the United States, was fundamental to restoring confidence. This is true also of the situations in Brazil, Korea, and Thailand. The argument against this type of approach, of course, is the question of moral hazard. There is a common thread of thinking that says, for example, that the Asian crisis was

caused to some extent by moral hazard deriving from the Mexico bailout four years earlier. However, there's absolutely no empirical evidence of this, and I don't think that this has been the case. For example, after the Mexican crisis, spreads for the Asian debt did not fall. I mean, this is something that we have been hearing all over, but I fail to see any hard evidence for this case. I think the Russian situation is totally different, and there we have political elements and so on that I don't want to discuss at length, but in my view this whole issue of moral hazard has been greatly exaggerated and has colored a lot the discussion of private-sector participation. I think George Soros was right in saying yesterday that the problem going forward is not excessive lending but too little lending, and I think there's a lot of evidence that investors are pulling out of emerging markets. The importance of dedicated funds and crossover investors has greatly diminished, in part due to this whole discussion of ways to try to bring in the private sector in some automatic way.

Let me conclude by saying that, notwithstanding the legitimate criticism of some aspects of IMF programs that were touched on yesterday by Jeffrey Sachs and others regarding specific actions in Indonesia and so on, the case-by-case approach that has been taken by the fund in the resolution of financial crises is probably right, and after two and a half years of discussing these issues—after two and a half years of discussing things like changes in financial architecture, international financial systems and so on—we have come up so far with two complete items. One is the Contingent Credit Line (CCL), and it has not even started: it's not operational yet. There has been a discussion for a year and a half. This was an American initiative that was shut down by the Europeans. Clearly: they put forth all the conditions so that it would not be utilized. The other item is the sixty-four codes that were mentioned yesterday. These are the only two complete things that we have today, so my conclusion is that the lessons that we have learned should serve to strengthen the internal workings of emerging markets. I think we have all been learning the lessons of working hard on fixing balance sheets, on making the economies more resilient, and all the things we've talked about, like moving to float the exchange rate and strengthening the financial sector because, frankly, I don't have much hope that anything will come out in terms of reforms in the international financial system that will be very helpful. Now, in the case of Mexico, and to conclude, is all well that ends well? Not exactly. Although Mexico has been growing by 5.5 percent over the last five years, real wages are 80 percent or 85 percent of what they were before the crisis. Income distribution has worsened substantially after the crisis, and, let me tell you, there's absolutely no enthusiasm on the part of the Mexican population for globalization and for the reforms needed to push forward this effort, which we all, in this day, think is worthwhile. So we have to reflect also on this last item: on the type of political support that is needed in our countries to continue the globalization process.

3. Roberto G. Mendoza

I would like to thank Martin Feldstein for giving me the opportunity to express a private-sector viewpoint on the papers that have been presented here, and in particular I'd like to congratulate William R. Cline on a cogent and compelling analysis.

The Cline paper largely addresses two issues: first, whether "big programs" are generally beneficial; and second, the relative merits of coercive rules-based systems and—at the other end of the spectrum—voluntary, market-based responses to crises. Cline analyzes clearly the theoretical justification for various forms of intervention. He concludes convincingly that a case-by-case, flexible, noncoercive approach, which explicitly recognizes the distinction between illiquidity and insolvency and can deal effectively with the messy, confusing situations that occur every time a crisis erupts. Cline lists seven principles that should govern crisis management; from a market participant's viewpoint, they appear very sound.

In my few minutes I will try to explain why I think that the natural tendencies of markets and the self-interest of market participants will serve to reinforce the conclusion that the Cline paper draws about the way to prevent, or at least diminish, the risk of emerging market crises and to reduce their cost when they do occur.

Three main points support this argument. First (and here I completely agree with Guillermo Ortiz's thesis), I think that the issue of moral hazard is of great theoretical interest and little practical import. Cline's paper argues that moral hazard represents a general, but frequently trivial, proposition. That seems about right to me. I don't believe that any serious creditor makes an investment decision on the basis that (a) it might go wrong and (b) if it goes wrong there will be some kind of official bailout that will protect him. In most so-called bailouts, creditors suffer large, explicit losses or implicit reputational losses. A price is paid.

I find the idea of debtor moral hazard even more difficult to understand. Default exacts a huge price on a country's government, its people, and its institutions. Avoidance of default through a bailout has lesser but nonetheless significant adverse consequences. The moral hazard issue requires consideration more (although not exclusively) as a theoretical rather than a practical matter; I do not believe that it influences behavior to the extent that the more extreme opponents of official support packages would argue.

Secondly, exchange offers *do* work. The strongest argument against exchange offers, as I understand it, is that in the absence of some type of legally enforceable cramdown mechanism that ensures completion, the borrower will be sued. However the suits are unlikely to derail the process. Analogously, many contested merger and acquisitions transactions that in-

volve tender offers spawn lawsuits, which are usually a nuisance and can occasionally create friction costs. However, they do not often affect the outcome or materially influence the underlying economics of a transaction. In many tender offers, lawsuits are simply a fact of life.

Third, market participants, including official institutions, have a flexible toolkit of standstills, collective action clauses, litigation stays, and other mechanisms that can prove effective if voluntarily negotiated. The fundamental issue is whether it makes sense to impose mechanisms that interfere with, as opposed to reinforce, the workings of the market. In my opinion, the former would prove very damaging. Again, I would absolutely agree with Ortiz's point that the fear of market-distorting intervention by the official sector has contributed importantly to the reduction in size of the emerging markets asset class.

Three recommendations: first, policymakers and regulators should encourage—and eventually require—the adoption of fair market value accounting by banks. Arguably, one of the main causes of the crises of the 1990s was that certain market participants (and particularly insured depositories in the case of the Southeast Asian countries) lent money on terms and conditions that simply misjudged the risk-reward ratio involved. Banks would extend short-term, floating-rate, foreign currency financing (implicitly or explicitly government guaranteed) to borrowers who invested in illiquid projects that generated local currency cash flows. Leaving aside the issue of whether the underlying projects in and of themselves made any sense, the combination of all the classic mismatches led to the predictable result.

Why did the borrowers make those investments? Primarily because their riskiness was not reflected in the cost of the funding—a situation that can only end in tears. Commercial banks were prepared to make those loans in part because they could book assets at cost even though the assets were worth substantially less than cost on an economic basis. Moreover, there was a market, the derivatives market, that could have priced that risk reasonably accurately. Fair market value accounting would have forced the recognition of an immediate loss and therefore sharply inhibited the granting of such loans.

The systemic problem is even more serious than implied by this simple example because derivatives contracts are also booked effectively at cost rather than at fair market value. The historical cost accounting model permits banks to extend credit at below market rates without recognizing a loss and to sustain for some time equity price valuations that do not reflect their underlying cash flow–generating capabilities. This encourages inefficient capital allocation.

The widespread use of fair market value accounting would greatly reduce both the risk of crises and the cost of resolving them when they occur. However, there are two kinds of objections to this type of reform, the first being

that fair market value accounting would increase systemic risk. Although this point is debatable, greater transparency in financial reporting, in my opinion, would decrease volatility over time. Market volatility is a reality. It is difficult—some might say impossible—to argue that a failure to recognize this reality in the financial statements of banks will decrease the risk inherent in the system.

Perhaps the more serious objection is that fair market value accounting would not in fact impose transparency, owing to the inability to price loans on a mark-to-market basis. Although this may have been true in the past, today's derivatives market for credit risk is broad and deep enough to price almost any item on or off a bank's balance sheet individually and in aggregate with a reasonable degree of accuracy—and certainly more usefully than historical cost.

My second recommendation is simply that policymakers should not fight the market view that, for most countries, the appropriate exchange rate policy is a responsible free float, that is, one that permits occasional "leaning against the wind" but does not attempt to maintain a band.

The third point relates to risk management procedures. The discussion last night highlighted the self-reinforcing characteristic of risk management methodologies. Market participants tend to use broadly similar models; when volatility increases, there is generalized pressure either to commit more capital or to reduce risk exposures. The latter approach represents the more natural tendency for publicly held firms (as opposed to hedge funds), with the result that volatility levels often increase further.

This view is largely accurate but is not an argument for downplaying the validity of the models. Rather, it simply suggests that the senior managements of financial firms must be quantitatively sophisticated enough to understand the subtleties of model outputs in order to have the confidence to override them when appropriate. This is a more complex responsibility than the traditional supervision of risk takers and places an added burden on the regulators to satisfy themselves that senior managements and boards are in a position to assume it.

The above three points suggest that, wherever possible, the regulators should seek to allow market discipline rather than official intervention to regulate the financial system. This would support the notion that governments should seek to reduce the distortions created by deposit insurance, possibly through the adoption of narrow banking models, although other, less radical market-oriented initiatives (such as mandatory subordinated debt issuance) may prove more realistic in the near term.

The debate in this conference has focused on the source of discipline to reduce the probability of crises and mitigate their impact when they do occur. The Cline paper argues persuasively that the market itself is the best source of that discipline. The removal of distortions such as coercive official

intervention and opaque accounting practices that influence behavior will, over time, increase the effectiveness of market discipline and therefore reduce systemic risk. Advances in technology have made this possible for two fundamental reasons: (a) they have facilitated the development of the derivatives markets, which encourage a more efficient pricing, segmentation, and distribution of all types of risk; and (b) information has become a free good, seamlessly accessible by all market participants. Transparency of and access to information permit the market to act as an enlightened policymaker. We heard last night that market participants should anticipate a regulatory and policy framework that combines "constructive ambiguity . . . with constrained discretion." This sounds like an intelligent complement to market discipline.

4. Ammar Siamwalla

It is amazing how much a change in perspective can affect the way one analyzes a given problem. Cline's paper starts from the private-sector lenders' perspective, and when there is a financial crisis, then the matter becomes a matter of "public-sector" concern, meaning by this, first, the borrowers' governments. Usually, it is the insufficiency of foreign exchange reserves to cope with a sudden exodus of the private creditors that ignites a financial crisis and the consequent arrival of the International Monetary Fund. The question that arises is how the private (lending) banks can be drawn in to minimize the attendant damage to the country and, perhaps, to the banks themselves.

For those of us living in the trenches, to ask how the private sector (both domestic and foreign) can be asked to bail the public sector out would appear quite odd (not wrong, but odd). The problem that Thailand and, I daresay, most other countries in Asia have been facing since 1997 is how to minimize the damage to our public finances from bailing out both our own private sector (banks and, in some cases, corporations as well) and the foreign banks. That the Thai crisis took place was due mostly to the heavy reliance on bank lending, notwithstanding the global shift in international investment toward equity and away from debt reported in Cline's paper. Most Thai borrowers depended heavily on borrowing from domestic banks (and their Bangkok International Banking Facility window), which in turn borrowed abroad for their dollar-denominated loans.

At the end of 1996, Thailand's total private external debt was $92 billion (its gross domestic product [GDP] at the then exchange rate was $180 billion); of this amount, the corporate sector (including the finance companies) owed directly to foreign lenders approximately $45 billion, the rest be-

ing owed by banks and finance companies, which had on-lent to the corporate sector in dollars. The rush to exit after the floating of the baht[1] by the foreign lenders led to the rapid depreciation of the currency, which in effect led a large proportion of the Thai private sector to become insolvent. In order to prevent the run on the domestic financial institutions by both depositors and foreign lenders, the government had to give a blanket guarantee for both depositors and lenders for all financial institutions, except the sixteen that closed before the issuance of the guarantee. This guarantee is turning out to be very costly for the taxpayers, with recent cost estimates for financial system restructuring running as high as 40 percent of GDP. Let it be noted that the cost of this bailout, including the cost to the foreign banks, is being borne almost entirely by the Thai taxpayers.

What could have been done to minimize the damage? One suggestion by Cline would have lessened it somewhat: to promote a private-sector collective action. At the very least, the sharp currency depreciation in the last quarter of 1997 and the first quarter of 1998 that follows from the exodus of the foreign banks would be limited. The open question in such a situation is the role of the government to nudge the various parties toward an agreement. In this respect, one thing the Thai government should have done was to make its guarantee of loans to financial institutions conditional upon an extension of the term of the loans.

In the event, the only thing that the Thai government did was to request the various banks to limit their withdrawals voluntarily. Only the Japanese banks appeared to have done so, but then Japanese banks were lending mostly to subsidiaries of Japanese multinationals.

By the middle of 1998, the rush to the exit door and the sharp currency depreciation came to an end. From that point on, the Thai government's central task has been to see to the restructuring the financial sector, which had been laid low by the fact that most of their loans have gone sour. Most of the smaller banks and many finance companies were taken over by the government, and the hole in their capital was or will be filled by the government. The larger banks were given time (approximately two and one-half years) to recapitalize themselves, with the government offering to provide part of the money. While this recapitalization process is going on, banks had to work out their problem loans with their debtors. With both lenders and borrowers starved of equity, it is unsurprising that there was a sharp fall of investment, and thence of output, which further accentuated the problem of nonperforming loans.

What the Thai government did not do at the time was to buy out the problem loans from the banks and park it somewhere, so as to let the banks re-

1. The attack on the baht in the last quarter of 1996 and the first half of 1997 was launched mostly by the speculators. This led to the depletion of the reserves and the floating of the currency. Relatively little outflow of bank money took place before the devaluation. The bulk of that outflow took place in the second half of 1997 and the first quarter of 1998.

sume lending. The main fear was that these problem loans, once parked, particularly in a government-owned parking lot, would sharply deteriorate. Indeed, the performance of the state banks since 1997 indicates very clearly that this route would have been unwise.

Discussion Summary

Anne O. Krueger suggested that we need a better theory of crisis. In addition to addressing the causes of crisis, the theory should help us understand when there are opportunities for reform. One issue here is how much you take advantage of short-term problems to address long-term problems such as chronic fiscal deficits or weak banking systems. Another issue is how far-reaching the reforms should be. Krueger said that this depends in part on whether you are trying to avoid crises in the short to medium term or trying to change the structure of the economy so that a crisis never happens again. The answer depends in part how often the country needed help in the past. Turkey, which has suffered repeated crises, might be treated differently from Korea, which has been relatively crisis-free. On the other hand, Krueger pointed out that Korea continues to have serious problems with nonperforming loans in its banking system and so remains vulnerable to a future crisis.

Krueger said that her implicit theory is that crises come along because governments did not pursue the necessary structural reforms, and they will continue to put them off until forced to do so. This leads her to believe that structural reforms such as banking reform and trade liberalization should be part of the crisis response. If, instead, you hold the view that governments will reform in good time, then it is sensible to concentrate on the immediate things necessary to overcome the crisis.

Martin Wolf agreed that crises lead countries to reform. Even so, this does not mean that crises are a good time to try to push through reforms. He thinks that having someone come in from outside de-legitimizes reform over the longer run. Turning to Cline's paper, he said he did not agree with the most important point—which he summed up as "give lots of money." He pointed out that the crises have imposed massive social costs both in terms of recessions and fiscal costs to taxpayers. The participants in the financial transactions did not internalize these costs. He concludes that the optimal flow of short-term capital to Asia may be zero and that it is wrong to insure investors fully against the risks.

Andrew Crockett agreed with Roberto Mendoza about the desirability of "fair value" or mark-to-market accounting in the financial sector. However, the case was not an open-and-shut one. There are both practical and con-

ceptual difficulties in marking to market nonmarketable assets, such as loans. Moreover, other interested parties, such as securities supervisors and the tax authorities, have reservations about allowing provisions before a probability of loss has been established. Still others are concerned about the volatility that mark-to-market accounting would introduce into financial institutions' income streams. Nevertheless, despite all the obstacles, he felt that this approach was the best way of disciplining risk taking.

On the subject of risk management practices, Crockett argued that financial institutions were reasonably good at valuing what he called "relative risks," (i.e., the riskiness of different claims at a point in time) but less good at measuring absolute undiversifiable risks associated with the economic cycle. He said, "we all know the worst loans are made at the best times." The challenge in designing supervisory arrangements and risk management practices is to develop models that are better attuned to the movement of risk over the cycle.

Peter Garber pointed out that financial institutions use stress testing and event risk scenarios to go beyond value-at-risk modeling. These can be used to put quantitative limits on positions beyond what the value-at-risk models would dictate. Moreover, these methods are much more cyclically oriented, he said. Regarding the ease of marking to market, he agreed that credit derivatives could be very useful but said there is a lot of "magic" involved in their pricing as well, and he stressed the difficulties of pricing very long-term loans and illiquid credits. He agreed that asset-backed securities could be used to value packages of loans, but he again noted that it is not as easy as one might think to come up with accurate values.

Jacob Frenkel returned to the issue of reform "ownership." He remembered that it used to be the case that the IMF was comfortable with being "bashed" for the reforms they demanded. Governments often found it useful to be seen as coerced by the IMF in pushing through politically difficult reforms. However, this turned out to be an untenable situation, he said. The program does not have to be designed in the capital of the country. It can be designed by experts anywhere and negotiated. Wherever it is designed, once a program is agreed upon it must be under the ownership of the government if it is to have a chance of success.

Montek S. Ahluwalia raised the issue of what can be expected from the international community as lenders of last resort as opposed to reliance on private-sector involvement. Commenting on the phrase "constructive ambiguity" from Cline's paper, he said that constructive ambiguity is better than destructive ambiguity but added that what developing countries need is some constructive clarity. Developing countries would be better off knowing the limits to the official assistance they can get and, beyond that, what the rules for involving the private sector would be. Given Robert Rubin's prediction that there will be more crises in the future with more countries engaging with the international capital markets, Ahluwalia reiterated that

countries such as India need to know better what lender-of-last-resort function exists. At present, the only way that the lender of last resort can do a credible job is if IMF resources are topped up with substantial bilateral resources, and this (perhaps unavoidably) introduces a great deal of political uncertainty. Ahluwalia is not sure this is "constructive."

William R. Cline said he understood the desire for clarity, but he sees a danger in a "very quick slide from clarity into essentially mandatory resolution." Cline believes it is much better to get toward what he called the voluntary end of private-sector involvement. The clearer you are, the more likely it is you go to capital controls. Moreover, the easier it is to default, the more likely it is that you shut down lending. He agreed with Roberto Mendoza and Guillermo Ortiz that the experiments in "bailing in" the private sector had contributed to the rising spreads and "sluggishness" that we have seen in some markets. Finally, he said he disagreed with Mervyn King that it will be impossible to come up with the large packages we have seen in the past. He asked: "If Chile goes down tomorrow, for example, is it impossible to come up with $7 billion—the same fraction of GNP we came up with for Brazil?" He understands why King is saying this, given the need to avoid the moral hazard problem that comes with large packages. He thinks that because of the good record of Chile or a comparable country, it is very likely that such a case would successfully be toward the voluntary end of private-sector involvement. Given this likely involvement, Cline thinks we need to be very careful in moving in the direction of too much coercion.

E. Gerald Corrigan said that a sizable majority of emerging market countries were making progress in most areas of crisis prevention—macro policy, debt management policy, risk management policy, and so on—but noted that progress has been very slow in banking reform. He expressed surprise that a better job had not been done through prudential supervisory practices at dealing with the problem of short-term unsecured credit. Given the progress that has been made, he said that the risk of systemic sovereign financial crisis has come down, but added that it is nowhere near zero. On the interbank restructuring in Korea in 1997–98, he pointed out that there had been a lot of comment that it was a bad idea and had been forced upon Korea by the IMF. He thinks both these claims are wrong and said there were a number of approaches on the table at that time that would have been rejected outright by the Korean government.

On the issue of what should be done in the future regarding private-sector involvement, Corrigan listed four alternatives: outright new money, unilateral suspension of payments, voluntary standstills, and voluntary restructuring. He thinks the first of these—new money—will not happen and the second—stopping payments—is a recipe for further instability. He thinks the emphasis should be put on the latter two options on the list, although he agrees with Mendoza that what is "voluntary" is sometimes in the eye of the beholder.

More generally, Corrigan thinks we should see that there is a menu of options, recognizing that there is no one thing that is going to solve the problem at the point of crisis. He added that the Fund's adjusted Contingent Credit Facility (CCF) should now be seen as part of the menu, and if it is made more flexible, it could be the basis for encouraging a greater use of appropriately priced private-sector standby-type facilities. Corrigan finished with the controversial opinion that, in "truly exceptional circumstances," there could be limited and partial official-sector credit enhancements. Although he expected that most people did not want to hear that, he reminded the audience that this was exactly what was done with Brady bonds. Thus, in shaping a menu, he said we "should never say never."

Paul Volcker disagreed that crises occurred primarily because of weak banking systems. Instead, he sees the problem in the nature of financial markets and their wide swings coming up against small and inherently vulnerable financial systems. Mexico didn't have a crisis because of its weak banking system but because of its rising *tesobono* debt. He said that financial markets ordinarily prosper from volatility, but he asked if industry can prosper in such an environment. Such volatility, he added, has a limited impact on the United States because it is a large, stable economy. It plays havoc, however, with smaller economies, in part because they are more vulnerable to exchange rate swings.

George Soros complained that there was no discussion of what had happened in Russia. He said that the G7 did not want to put up their own money, and the IMF was limited in what it could do since it signed a letter of intent with a government that could not produce. More generally, he said it would be useful to have a mechanism whereby a letter would be forthcoming from the Fund stating the conditions that were necessary for it to act as a lender of last resort.

On the question of what works and what doesn't in responding to a crisis, *Jeffrey Sachs* made two observations. First, he said that the "hemorrhaging" must be stopped. To do this, you need to understand where it is coming from—fiscal deficits or the financial sector. If the problem is fiscal, then the fiscal gap must be closed. If the problem is financial, there are three options: new money, a unilateral standstill, and a voluntary rollover. Sachs said that it is wrong to rule out any of these, adding that Mexico "worked" because of the United States, but often new money or a rollover will not be forthcoming.

Second, Sachs said that running things from Washington is not sustainable in today's world. Part of the problem is that "no money is brought to the table, only conditions," said Sachs, pointing to the negative net transfers to Africa. He said that he would not rule out considering issues of long-term management, but the current mix of conditions without money is failing. Moreover, he thinks that the current model we are using for development is fatally limited. The issues should not be limited to questions

of governance and corruption but should extend to issues such as disease and clean water.

Frederic Mishkin said that we needed to think of the IMF as fighting a war. It needs to focus on two things: macro policy and getting the financial sector working again (which requires some structural reform). However, he said, "this is where it should stop." Referring to Nicholas Stern's suggestion from an earlier session, he said the World Bank should not have two-page plans for structural reform ready to implement at the time of the crisis but, rather, should focus on long-term thinking. In Mishkin's view the IMF has a high-quality staff, but it is overwhelmed. It is also in a political bind. On one side the Meltzer commission tells it to narrow its focus. However, the IMF's board has not strongly supported this.

Lin See Yan suggested that the Malaysian case is interesting in that it opted first for IMF advice (even though it was not eligible for financial assistance because the economy was judged to be "still strong" when entering the crisis), that is, tighten the fiscal budget (despite three previous years of large surpluses); tighten monetary policy (by raising interest rates to protect capital outflows); and reduce balance-of-payments current deficit (even though it was not in fundamental disequilibrium). This sent the economy into a tailspin that threatened political and social stability and led to further loss of confidence. The IMF's hungry "big eyes are much too wide for its narrow stomach," Lin said. Malaysia needed to change horses in midstream with worsening expectations regarding exchange rate volatility, portfolio capital outflows and stock market sentiment. The objective of public policy then turned its focus on the reestablishment of social and business stability through a number of pragmatic measures: (a) adopting Keynesian expansionary fiscal programs directed mainly at social (education and health) and poverty spending; (b) fixing the exchange rate to the US$ with the 40 percent devaluation (expectations pointing to 60 percent) to inject certainty in doing business; (c) introducing easy-to-implement selective capital controls directed mainly at temporarily stopping further portfolio outflows and denying speculators ready access to ringgit bank balances and currency; and (d) setting up the National Economic Action Council to take direct charge of crisis management, with full powers to implement effectively the "new" deal, including setting up new institutions to act on banking reform, bank recapitalization, and debt restructuring and resolution. Ironically, this option is not really unorthodox—indeed, it is a rather conventional Keynesian approach to reflate and reestablish confidence (after all, the IMF rules do allow temporary capital controls in a crisis). It introduced a modernized system of selected capital controls (designed to fit the occasion), a system that is highly focused, with rules precisely defined for effective implementation; well organized, leaving the banks' vast network with wide-ranging authority to approve; clearly decentralized, so that only large transactions need to be referred to the central bank; and subject to constant

review, for effectiveness in practice. To date, the absence of any serious bureaucratic inefficiencies or black market in the ringgit reflects well on the appropriateness of the mechanisms that have been put in place. All in all, the prompt return of confidence and the early V-shaped economic recovery, with no adverse political and social fallout, appear to suggest that there may be something in the Malaysian way of managing its own type of crisis.

Timothy Geithner said that those who have been heavily critical of the Fund should temper their criticisms with some humility and ask themselves what they would have done, and how they would have performed, in similar circumstances with similar information and similar time pressures. Responding to Mervyn King's presentation on creditor relations, Geithner said he was troubled by King's enthusiasm for the broader use of standstills or suspensions of payments and in particular by establishing any presumption that a standstill would be invoked as a condition for access to large-scale financial assistance. Responding to Jeffrey Sachs, he said that the crucial issue is not necessarily whether net transfers to the poorest countries are too low, but that if you believe they are and want to see them increased you have to have a framework in place that will make that possible. The involvement in the IMF is likely to be critical to the willingness of donors to provide more concessional resources.

Paul Keating expressed the view that the world can no longer be run from the United States. The United States Congress has neither the internationalism nor the will to do it. The world's remaining superpower has become less generous over time, he said, and has downgraded the importance of India and China in the world. He said that India has to take nuclear actions to get noticed. In his view, the structure that followed the allied victory in 1945 is no longer adequate. The key question now is how we empower the Bretton Woods institutions, which are struggling with a world of integrated international markets and new communications technologies. He also questioned how representative the G7 is and blamed the Clinton administration for failing to create a more inclusive world order. He closed by saying the middle powers must be recognized and allowed to have a role in decision making, remarking, "the old political structure has had its day."

With respect to the issue of private-sector involvement, *Edwin Truman* said his sense is that this issue is often oversimplified as one involving bank or bond creditors on the one hand and a sovereign borrower on the other, or perhaps banks with the explicit or implicit guarantee of the sovereign. However, in the three major Asian cases and Brazil, although not Russia, this assumption about the dominant involvement of the sovereign did not hold. In those cases, broad-based private-sector involvement (i.e., a standstill) would have had two potentially troublesome consequences: First, it would have involved the extensive application of exchange and capital controls that, once imposed, are usually very difficult to dismantle and also can be very disruptive to trade. Second, it would have risked the socialization of

many private-sector obligations, as both the creditors and the debtors would have looked to the government to guarantee the repayment of obligations that had been blocked. As we saw in the 1980s, such socialization of debt is very expensive and undesirable, given that it leads to a bailout of the private sector.